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Journal of the Society of Arts.

FRIDAY, JANUARY 23, 1863.

CENTRAL COMMITTEE OF EDUCA-TIONAL UNIONS IN CONNEXION WITH THE SOCIETY OF ARTS.

The following circular, enclosing particulars of the Examinations of the Central Committee (see the last page of the Society's Examination Programme) has been issued to the Institutions:

Society of Arts, John-street, Adelphi, London, W.C., 22nd January, 1863.

DEAR SIR,—I beg to call your special attention to the Elementary Examinations of the "Central Committee," of which I enclose particulars.

These Examinations are intended principally for those who are not sufficiently advanced to be able to avail themselves of the Final Examinations of the Society of Arts.

In case of your having any Candidates, you will observe that application should be made to me for the requisite forms on or before the 2nd February.

I am, dear sir, yours faithfully, P. LE NEVE FOSTER, Secretary to the Central Committee.

SEVENTH ORDINARY MEETING.

WEDNESDAY, JANUARY 21, 1863.

The Seventh Ordinary Meeting of the One Hundred and Ninth Session was held on Wednesday, the 21st inst., Sir Thomas Phillips, F.G.S., Chairman of the Council, in the chair.

The following candidates were proposed for election as members of the Society:—

Browne, William, jun	Patent Rope Works, Wiven- hoe, Colchester.
Collyer, Charles Edwards.	150, Fenchurch-street, E.C.
Dawbarn, Richard Wood.	Wisbech.
Merry, William L	13, Pembridge-place, Bays- water, W.
Rivett, Joseph Adric	Prestoln, near Bolton, Man- chester.
Willis, James	42, Little Britain, E.C.

The following Candidates were balloted for and duly elected members of the Society:—

and duty cicoled members of the society.				
Ell, George				
Home, D. Milne, (Royal Hyde-park Barracks, W.				
Jones, James W 86, Piccadilly, W., and 28, Mark-lane, E.C.				
Hewlett, Anthony Hare Burlington arcade, W.				
Klaftenberger, Charles I. 157, Regent-street, W.				
Lainson, George 1, Henry-place, Clapham, S.				
Macadam, Stevenson, Ph.D., F.R.S.E., F.C.S. President of the Royal Scottish Society of Arts, Edinburgh.				
Martin, William Henry 64 & 65, Burlington-arcade, W.				
Matthews, Frank, jun Driffield, Yorkshire.				
Nash, John Tullock 9, St. Stephen's-road, Bayswater, W.				
Pease, Joseph Whitwell. Woodlands, Darlington.				
Rosser, S. Egan				
Sands, Thos. C				

Tucker, Prof. Raymond .	Wellington College, Sand- hurst.			
Watkins, James	Grammar and Commercial School, Deptford, S.E. 88, Ebury-street, Eaton- square, S.W.			
Wiener, Charles	88, Ebury-street, Eaton- square, S.W.			
Williams, George Joseph.	dish-square. W.			
Wise, Francis	Chandos Chambers, Bucking- ham-street, Adelphi, W.C.			
AND AS HONORARY CORRESPONDING MEMBERS:-				

The Paper read was—

CONVICT LABOUR AND COLONISATION, WITH SUGGESTIONS FOR THE ESTABLISHMENT OF A NEW PENAL SETTLEMENT IN THE HUDSON'S BAY TERRITORIES.

By A. K. Isbister, M.A., of the Middle Temple.

The history of convict discipline and transportation is intimately connected with the growth and extension of the colonial empire of this country, and, consequently, with the spread of its Commerce, Arts, Manufactures, and Political Power. It is from this aspect, as coming legitimately within the province of this Society, that it is proposed in the present paper to discuss the important subject of convict labour and colonisation, a subject, at this moment, exciting a deep and general interest throughout the country.

The law books tell us that exile was first introduced as a punishment in the reign of Queen Elizabeth, by Stat. 39 Eliz., c. 4, which enacted that "such rogues as were dangerons to the inferior people should be banished the realm." The statute in which the word transportation is first used is Act 18 Car. II., c. 3, which gives a power to the judges, at their discretion, either to execute or transport to America for life, the mosstroopers of Cumberland and Northumberland. Transportation was first brought into general use, as a punishment, in the year 1718, by Stat. 4 Geo. I., c. 11, continued by Stat. 6, Geo. I., c. 23, which allowed courts of law a discretionary power to order felons who were by law entitled to benefit of clergy, to be transported to the American plantations. Under these enactments persons were allowed to contract for the transportation of convicts to the colonies, with an interest in their labour for seven or fourteen years, according to the period of the conviction. The system of transportation to the American colonies continued for fifty-six years, until the breaking out of the American Revolution in 1775. The convicts having accumulated greatly during the next few years, when the intercourse with America was closed, it became necessary to resort to some other expedient, and in the choice of difficulties the system of the hulks was suggested, and first adopted under the authority of a Statute of 16 Geo. III. Various other expedients were subsequently tried, such as the establishment of penitentiaries, and the employment of convicts in clearing and deepening the Thames and other rivers. These expedients proving, however, ineffectual to meet the evil, transportation was again revived in 1784, by Act 24 Geo. III., c. 56. After some unsuccessful attempts to dispose of the convicts through the medium of contractors, in our settlements in Africa, Botany Bay, on the eastern coast of New South Wales, was, in the year 1787, selected as a permanent receptacle for criminals, and an Act of the Legislatue was passed authorising the establishment of a Court of Judicature, for the trial of offenders who should be transported there. The system of transportation to Australia thus inaugurated continued in operation, greatly to the advantage not only of the mother country, but of the colonies, until the appointment of the Committee of the House of Commons in 1837, commonly known as Sir William

Molesworth's Committee, which reported so strongly against the system, and its injurious operation in impeding the progress of free emigration, that the Government were forced to discontinue it. The abandonment of transporta-tion was strongly opposed at the time by the colony of New South Wales, which may truly be said to have been itself the creation of convict labour; but when, a short time afterwards, the Government attempted to re-introduce it, it was found that the agitation set on foot in England had effected a complete revolution in the sentiments of the colonists, who now refused to receive any more convicts from Britain. Attempts were then made to distribute them partially among other colonies, but the Cape of Good Hope actually rebelled against the experiment. Its example was shortly afterwards followed by Van Dieman's Land, and, by 1853, Western Australia was the only colony willing to receive convicts in small numbers. In that year transportation was finally abolished as a judicial sentence, by the Act 16 and 17 Vict., c. 99, and "Penal Servitude" substituted in its place. Under this system, criminals, as is well known, are subjected to three distinct stages of reformatory treatment. 1. A period of separate confinement in gaols adapted for that purpose in various parts of the kingdom. 2. A period of associated labour, or penal servitude, in proportion to the length of the sentence. 3. A period of modified freedom, on "Ticket-of-leave," at home or in the colonies, Western Australia being, as already mentioned, now the only colony available.

It is not my intention to trace the various modifications which the system of penal servitude has undergone, or to investigate the causes which have led to its failure, for that it has failed seems now to be admitted even by its warmest advocates. It is difficult, indeed, to conceive how a system could otherwise than fail, the essential principle of which is the annual discharge of some thousands of criminals, after their term of reformatory discipline has expired, upon a population whose social system they have outraged perhaps for a series of yearsa population which will not receive them; which will not employ them; which has no place for them; and where they are consequently, and of necessity, cast back upon a fresh career of crime as the only means of preserving a wretched existence. Against this inexorable social law our model prisons, our penitentiaries, our reformatory efforts, however meritorious, are powerless, for so long as these expedients fail in re-establishing the criminal as a useful citizen at the end of his sentence, the great object for which they were instituted remains unaccomplished, if, indeed, they are not, in reality, aggravating the evil they are designed to eradicate, by casting forth annually on society the materials which, sooner or later, go to swell the ranks of that great army of crime which is recruiting so rapidly in our midst, and to which every year is contributing fresh additions.

To remedy this evil, transportation appears to me to be the best system of punishment which has ever been devised, being, to quote the words of the late Lord Chancellor Campbell, "a punishment very formidable in anticipation, yet comparatively mild in endurance, affording the public the best security against repetition of the crime, and affording the convict the best, perhaps the only, chance of reformation." We all know what important results it has achieved in our American and Australian colonies, where the labour of convicts, properly utilised and directed, has contributed so largely towards opening up new and productive sources of wealth for the mother country, and laying the foundation of great and prosperous communities, which are, at this day, amongst the largest consumers of our manufactures, and among the chief supports of our commercial pre-eminence and prosperity. There is no reason whatever why an experiment which has been already so successful should not be repeated. We have seen that for more than fifty years it worked successfully in America, when it was uddenly arrested by the War of Independence. It was

Wales, and its discontinuance there, strongly opposed as we have seen, in the first instance, by the colony itself, was, in reality, not the work of the colonists, but of Sir William Molesworth's Committee and a few active partisans in this country, who appear to have been mainly influenced by the reports of the operation of the system under very anomalous and exceptional circumstances in Norfolk Island. The evidence given before the committee on that occasion, and the use to which Norfolk Island was then, and has since been, applied by the opponents of transportation, affords a striking illustration of what may be effected by skilful and persevering agitation.

The horrors of this "pandemonium" have invariably formed, and form to this day, the stock argument flung at the head of any luckless wight who advocates the establishment of a penal settlement. As a writer in a recent number of the *Times* well observes, "To create a new penal settlement is, we are told, to create a 'Norfolk Island;' and there are those who consider that the simple use of these two words disposes of a great question. Let us look for a monent at the facts. Disagreeable as the contemplation may be, it is necessary. Norfolk Island was the seat of an establishment for the detention of convicts sent to the Australian colonies, and again convicted in those colonies—the very quintessence of villany. That the habitual life of such a community was one from which the imagination shrinks, is, no doubt, true enough; and it so happened that just then, an able and powerful party at home was zealous against transportation, and that party found in the horrors of Norfolk Island, narrated by some very clever witnesses in 'sensation' evidence, just the material they wanted to act on the popular imagination. It never occurred to them to discriminate—or rather, it would not have suited their purpose to discriminate-between the results of mismanagement or other special circumstances, in Norfolk Island itself, and the miserable, but inevitable, results, of every system of punishment by which criminals, under the full impulses of their wretched animal nature, are either herded together in gangs or buried in the inaction of penitentiaries. It is easy to talk of the horrors of Norfolk Island; but has any one ever dared to investigate those of Bermuda, or Gibraltar, or even of Portland and Dartmoor? Has any one ever sought to compare them with the mass of moral misery engendered in our prisons under the 'solitary' or the 'separate' systems? Nay, strange to say, have many of us reflected on the in-consistency of denouncing 'penal settlements,' and yet encouraging the emigration of masses of Chinese or other labourers, all, or nearly all, male, to regions where it is supposed their labour may be profitable? I ought to apologize for dwelling at all on such subjects, but it is necessary at least to allude to them, in order that we may be fully sensible of the humiliating but unavoidable truth that every system of secondary punishment presents but an aspect of misery from which, if we look at it separately and not in comparison with others, cur moral sense shrinks so as for the time to paralyze our judgment."

Criminals must be punished notwithstanding, and how this can best be accomplished so as to secure the two great objects of all preventive punishments—the protection of society and the permanent reformation of the offenderis the question which we are now called upon to decide. I would willingly add to these objects one which this Society may legitimately, in the interest of the public, take its part in promoting, namely, "that the punishment should, as far as possible, be of such a nature as to render the criminal useful to society during its infliction."

That transportation unites these three elements in a greater degree than any other mode of punishment will probably be admitted by all, and that it has not been at once adopted under the pressure of our present difficulties, arises no doubt mainly, if not entirely, from the reluctance which the Government must naturally feel to enter upon an undertaking, the success of which is dependent so or a similar period equally successful in New South entirely on the fluctuating opinions and interests of a

distant colony where the experiment must be practically worked out. Hence the opinion widely prevails that the time has come for the creation of a new penal settlement which shall, if possible, be entirely under our own control, and where, by avoiding the errors of our past policy, we may be able to establish a permanent receptacle for our criminals, and impart something like stability and certainty to our penal legislation.

Much of the success of such an experiment will of course depend on the locality selected. Wherever that may be, it is above all things desirable that the error which has been fatal to so many costly and abortive efforts of this nature already, should be avoided. For a penal settlement to be permanent it is essential that neither the country nor the climate shall be too good for the purpose; that the territory selected shall be good enough to yield to industry and labour the means of support, but not so inviting as to form an attraction to free settlers, who, after a time, will drive out the convict and compel us to find a new home for him elsewhere.

If the history of transportation is examined, it will be found that it is mainly to the neglect of this important principle that the failures and interruptions to which it has been subjected are due. In our early American set-tlements, in Australia, in Tasmania, in short, wherever we have gone, we have selected countries possessing probably the greatest attractions in regard to climate, soil, and other advantages for emigration in the whole range of our colonial possessions, and the results have been After an enormous expenditure everywhere the same. in establishing one penal settlement after another (each experiment costing us, it has been stated, not much less than half a million sterling!) we have been compelled, through the large influx of free settlers, who would no longer tolerate the presence of convicts among them, aided by agitators at home, to abandon them in turn, while to the criminal himself, transportation to such countries soon lost its terror, and ceased to be regarded as a punishment at all.

To establish a new penal settlement in any part of the Australian colonies, or in countries of similarly inviting character, as has been proposed, appears to me, therefore, with these facts before us for our instruction and warning, simply to invite a repetition of the failures which have compelled us to abandon transportation altogether, and resort to the far less effective system of penal servitude.*

* The Falkland Islands have recently been proposed among other localities for this purpose. I have no personal know-ledge of this territory, but the following communication, which appeared in one of the daily papers, seems to be conclusive as to the impossibility of establishing a self-supporting settlement in that bleak and dismal region:—

"THE FALKLAND ISLANDS AS A PENAL SETTLEMENT.

"SIR,-The Falkland Islands are at present attracting some attention as a likely locality for the establishment of a penal settlement. It may, perhaps, be of some public interest just now to state that the project, which is not a new one, was brought before the Transportation Committee of the House of Lords in 1856, who, after a very careful inquiry, pronounced it to be impractiable. Among the witnesses examined on that occasion was Mr. G. Rennie, who had been for seven years and a half Governor of the colony, and had then just returned. The following questions and answers from Mr. Rennie's evidence will, I think, convince every impartial person that the proposal of establishing a penal settlement in those islands, just now so strongly advocated, is, to say the least of it, an extremely injudicious one.

"Question 415. Are the committee to understand that your attempts to raise corn, though repeated, have been quite unsuccessful?—Mr. Rennie: Quite unsuccessful.

"416. And so with every other kind of grain?-Mr. Rennie:

And so with every kind of grain.

"417. Do potatoes grow there?—Mr. Rennie: Yes; all kinds of English vegetables grow well where sheltered.

"418. Do you mean by 'sheltered' in the valleys?—Mr.

What we want is a country presenting such conditions as will render transportation a permanent remedy for what in our state of society must be regarded as a permanent evil, and not a mere temporary resource, which may fail us at any moment.

I propose in the present paper to draw attention to a territory which I have more than once recommended for this purpose, and which appears to me to combine in a higher degree than any other in our possession all the requisite conditions for a great and comprehensive scheme of penal colonisation. I refer to the immense uninhabited country surrounding Hudson's Bay, occupying an area nearly equal to that of the whole continent of Europe, and capable of absorbing within its ample limits

the criminal population of England for centuries to come. In inquiring into the suitability of this territory for the purposes here contemplated, it is impossible not to be struck at the outset with the singularly close analogy it presents, in all important respects, to perhaps the most successful example of a penal colony in modern times-the Russian settlement of Siberia. Nor is it easy Nor is it easy to repress the conviction that under a different system as respects the development of its manifold natural advantages, this portion of the continent of North America might, from its geographical position and inherent resources, stand very much in the same relation to the Crown of England which its antitype in Northern Asia bears to the empire of Russia—which exercising over it the effectual sway of an organized Government, profits in return by the vast resources which it develops.

"The system on which Siberia has been, and continues to be colonised," says a recent English traveller in this region, "is admirable alike in theory and in practice. The per petrators of heinous crimes are sent to the mines; those who have been banished for minor delinquencies are settled in villages or on farms; and political offenders, comprising soldiers, authors, and statesmen, are generally established by themselves in little knots, communicating to all around them a degree of refinement unknown in other halfcivilized countries. In fact, for reforming the criminal, in addition to the punishment of the crime, Siberia undoubtedly is the best penitentiary in the world. When not bad enough for the mines, each exile is provided with a lot of ground, a house, a horse, two cows, and agricultural implements, and also for the first year with provisions. For three years he pays no taxes whatever, and for the next ten, only half the full amount. To bring fear as well as hope to operate in his favour, he clearly understands that his very first step will send him from his home and his family to toil as an outcast in the mines.

"Through her system of deportation, Russia has thus been indebted to Siberia for the amelioration, both moral and political, of her own condition. She has made good citizens of myriads who in other countries would have been indirectly condemned, on their first conviction, to a life of ignominy and shame; and thus has she virtually achieved the miracle of reconciling the safety of the innocent, not merely with the impunity, but even with the prosperity of the guilty."

Rennie: The peculiarity of the island is, that the prevailing winds are westerly, and the valleys generally run east and west.

"420. So that the valleys are worse than the hills?—Mr.

Rennie: Yes, they become funnels in fact.

"I am desirous of drawing attention through your columns to these facts, which seem to me to be fatal to the selection of the Falkland Islands as a penal settlement. A country where neither a tree nor a blade of corn can be grown, and where the inhabitants must be fed from England, at a distance of 8,000 miles, is certainly not fit for any settlement either penal or free, and could only be kept up at a ruinous expense.—I am, &c., GEOGRAPHICUS.

[&]quot;London, Dec. 29."

[&]quot;418. Do you mean by 'sheltered' in the valleys?—Mr.
Rennie: In gardens, surrounded by walls.

"419. Will not potatoes grow in sheltered valleys?—Mr.

"419. Will not potatoes grow in sheltered valleys?—Mr.

Nor, turning from its effects on Russia, to the direct benefits it has been the means of conferring on Siberia, are the results of this far-reaching and beneficent system of policy—anticipating rather than following, in all cases, the steps which have been taken to colonise the country

-less worthy of notice.

Notwithstanding the great extent of this vast territory, the inhospitable character of the climate in which a large portion of it is situated, and the physical difficulties to be encountered in traversing it, there is perhaps no part of it which is not virtually, as well as nominally, under the power of the Russian Government. It is divided and subdivided, and placed under the administration of governors, having a regular establishment of subordinate officers; and the constant communication of a regular post maintains an intercourse between St. Petersburg and every place intervening between it and the farthest fort of Kams-The influence of a controlling system is felt by the native tribes, who subsist on the soil which their forefathers occupied before them; and who, though it cannot be said to what extent they have lost the nomadic character of their predecessors, are become a peaceable, and, more or less, agricultural people. The Government restrains and regulates an increasing exile population, of whom (although individual cases of hardship must doubtless occur) we are told the general lot is as happy and prosperous as is consistent with their unhappy condition. At the same time, the resources of the territory have been sedulously and effectually developed; added to which, numerous important sources of a valuable foreign trade have been opened up. Of these it will be sufficient to mention, as the most important branches, the fur trade, the trade in ivory and leather, the international traffic with China, and the mines and washeries of the Siberian and Uralian gold fields, which, as is well-known, now constitute one of the chief sources of the revenue of the Russian empire. And all this, it should be observed, has been going on simultaneously with an annual influx of some thousands of convicts, continued for more than two centuries without intermission, and without any symptom of the system giving way or coming to an end.

I have dwelt at this length on the example of Siberia, because it affords a practical illustration of the development and successful operation of a system which it appears to me might be imitated with advantage in our own unoccupied possessions in North America. In the vast region surrounding Hudson's Bay, comprising an area of nearly equal extent, we have a precise counterpart of Siberia, and all the requisite conditions for an equally successful and comprehensive system of penal colonisation. We have in both territories a great trading company, monopolising the only important traffic, that in furs; but leaving the country, which they do not otherwise make use of, free to occupation and settlement as it may be wanted. Situated nearly under the same latitude, and exposed to similar physical conditions, the climate of both regions is severe, but not unhealthy; and the soil, though in large parts unproductive, is in others well adapted for agricultural purposes.

Within the last few years we have had, as respects the Hudson's Bay Territory, a most thorough and trustworthy investigation by a Committee of the House of Commons, of the character and resources of the country; and in the valuable report presented by them to Parliament, we have the most ample evidence that it possesses, as regards its climate and adaptation for settlement generally, all the requisites of a great and successful penal colony. I shall have occasion to show, as I proceed, that while, as compared with the corresponding districts of Northern Asia under the dominion of Russia, these territories afford the advantage of a readier access, namely, by sea, from the mother country, and an unrivalled system of inland watercommunication, they possess, at the same time, intrinsic resources at least adequate for the support and beneficial employment of a population, and the profitable investment of capital and labour. To these resources I shall now proceed briefly to refer.

A survey of the unoccupied tracts of British North America would present for notice five great natural

regions :-

(1.) The Columbian or Western Territory (comprising the greater part of the colony of British Columbia, with the adjacent districts)—a country of varied features, extending from the Rocky Mountains to the Pacific Ocean, and bounded severally on the north and south by the possessions of Russia and the United States.

(2.) The Prairie Region, drained by the Saskatchewan, the Red River and their affluents, and extending from the Rocky Mountains eastward to the chain of Great Lakes, affording a continuous communication by water from Canada to the Polar Sea in one direction, and, with some interruptions, a similar communication westward with the

Pacific Ocean.

(3.) The Wooded Region, occupying the remaining section of the country, to the shores of Hudson's and James's Bays, having for its northern limit the highest feeders of the Churchill River, and continuous southward with the vast primeval forest so well known as the seat of the lumber trade of Canada.

(4.) The strip of sterile country familiarly known as the "Barren Grounds," skirting the shores of the Polar

Sea; and

(5.) The Valley of the McKenzie and its tributaries, a well-wooded tract, situated north of the Prairie Region, and comprising the district between the Barren Grounds and the Russian settlements on the north-west coast.

The general character of the different districts will be sufficiently comprehended from this summary. Their united area cannot be correctly given; it certainly exceeds three millions of square miles; it is probably not much

under four

Excluding British Columbia, which, for the purposes of the present paper, may be omitted from our review, the most remarkable characteristic of the country east and north of the Rocky Mountains, consists in the numerous large rivers which traverse it. One of the most striking features connected with these rivers is the remarkable interlockage of their waters, forming natural systems of water communication by means of which the country can be traversed in every direction. Most of the rivers which drain what has been termed the "Wooded Region," have their outlets in or near James's Bay. One of the most important of these, on account of its situation, is the Moose River and its affluent, the Abbitibee. Both rise in lakes situated on the high ground between Canada and the Hudson's Bay territory, and being connected with the upper waters of the Michipicotton and Ottowa rivers (the former flowing into Lake Superior, and the latter into St. Lawrence,) are accordingly used as the most convenient means of communication between both countries, and are the most frequented roads from James's Bay to the great commercial town of Montreal. portant stream is Albany River, which affords a communication by means of English River and its tributaries and connected lakes, between James's Bay and Lake Winipeg. The Rupert River, which has its outlet at the bottom of James's Bay, and whose head waters are connected with those of the Saguenay of Lower Canada, affords a similar communication in an opposite direction with the Gulf of St. Lawrence, which is thus connected with Hudson's Bay on the one hand, and with Lake Superior, Lake Winipeg, and the Saskatchewan on the other. All these routes are more or less in actual use by the voyagers of the Hudson's Bay Company, and, although in their present condition they are unfit for the navigation of anything but small river craft and bateaux used in the fur trade, the existence of so many means of watercommunication, all interlocking with each other, is an interesting feature which may be turned to important account hereafter in the future history of these countries,

Lake Winipeg is the centre of another remarkable river system, whose numerous ramifications extend in every direction to the remotest parts of British North

America. This inland sea, as it may appropriately be termed with its system of associated lake basins—the Winipegoosis and the Manitobah—receives at its northern extremity its largest tributary, the Saskatchewan. All the waters which descend from the eastern declivity of the Rocky Mountains, between 47 and 53 degrees north latitude, unite in two large rivers the northern and southern branches of the Saskatchewan. branches form a junction about 450 miles from their source, and after a course of about 300 miles more, the united stream falls into Lake Winipeg, from which it again issues under the name of Nelson River, and after expanding several times in its course into lakes, finally empties itself into Hudson's Bay, near York Factory. It is navigable for boats from Rocky Mountain House, in longitude 115 deg. west, to Lake Winipeg, in longitude 98, upwards of 700 miles in a direct line, but by the actual course of the stream nearly double that distance. The north branch, whose sources are separated only by "a short portage" from those of McKenzie and Frazer Rivers (flowing respectively into the Northern and Pacific Oceans), is navigable from Fort Edmonton downward, without a single portage alike for boats and canoes. The upward navigation is, however, interrupted by a formidable rapid at the entrance of the river into Lake Winipeg, where boats, although they can descend without unloading, are unable to stem the force of the current in ascending, and have, therefore, to be transported over a portage more than a mile in length. The south branch is quite free from interruption, and is upon, the whole, a still finer stream than the northern. The whole river from its rise in the Rocky Mountains to its embouchure in Hudson's Bay is about 1,500 miles in length. The intercourse between Lake Winipeg and Hudson's Bay is chiefly carried on by means of a chain of small lakes and rivers, uniting in York River, which runs nearly parallel with the Sas-katchewan or Nelson, the two rivers falling into the sea nearly together. On the tongue of land between their mouths is situated York Factory, the principal port in Hudson's Bay, and the emporium of the Hudson's Bay Company's trade.

Another large stream exceeding the Saskatchewan in length, in volume, and in the extent of territory drained by its tributaries, is the McKenzie, rising like it in the eastern slopes of the Rocky Mountains, and flowing after a course of about 2,500 miles in a generally north and north-western direction into the Polar Sea, in lat. 68 deg. 30m. N., and long. 135 deg. W. The head waters of the McKenzie not only closely approach those of the Saskatchewan, but also those of the Columbia and Fraser Rivers, flowing through British Columbia into the Pacific. so that here again we have one of those remarkable inter-lockages of river systems even among the crests of the Rocky Mountains, which form so characteristic a feature of the physical geography of this portion of the continent of North America. There is a direct communication by means of a series of rivers and lakes which strike off from its northern extremity between Lake Winipeg and the McKenzie on the one hand, and, as already stated, between the same lake and York Factory on the other, by means of the York River, thus affording a direct water communication through the interior of the continent between Hudson's Bay and the Polar Sea. It is along this route, navigable throughout for boats, that the inland traffic of the Hudson's Bay Company is carried on, and by means of which supplies are forwarded from post to post without difficulty, from the emporium at York to the remotest stations on the McKenzie.

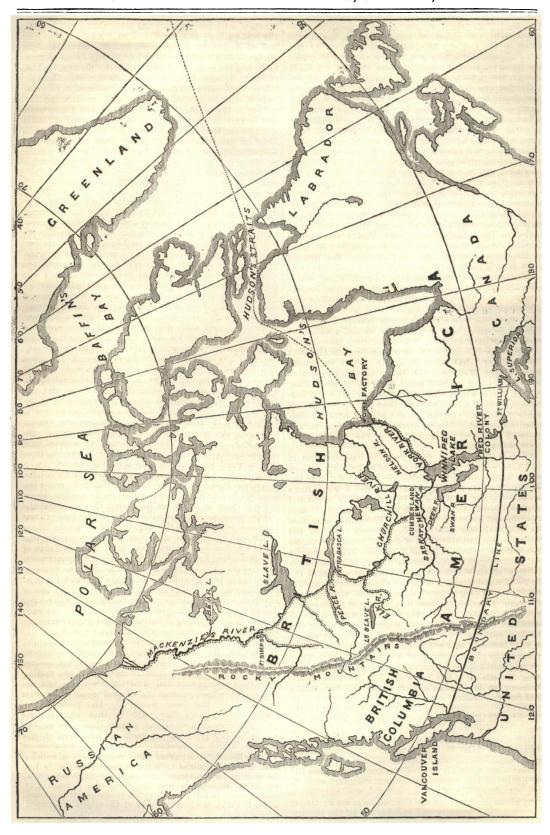
Here along a continuous waterway of between four and five thousand miles in extent, we have a country admirably adapted for a comprehensive scheme of penal colonisation—land certainly not of the first quality, and the less likely on that account to attract voluntary emigration, but susceptible of cultivation, and well adapted in many places for pasturage and the rearing of stock; timber in inexhaustible quantity and suitable for all the requireat great length.

ments of settlement; rivers and lakes abounding in fish of the best quality; and, lastly, a climate severe but healthy, and as proved by the experience of the servants of the Hudson's Bay Company, who have occupied the country for nearly two centuries, congenial to the European constitution.* In such a country, where the choice lies between labour and want, enforced residence would of itselt have all the force of a deterrent punishment, without resorting to the artificial expedients and restraints necessary in more favoured regions. A narrow verge of settlement on the banks of a rapid stream, with an impenetrable forest on either side, rendering escape hopeless except with the certainty of perishing in the wilderness, presents so many facilities for guarding the convicts which might be settled there, that not only would the expense of a costly guard be in a great measure dispensed with, but attempts at escape would probably be but few, and when made easily defeated. They could only be made in one way, that is by the river, and as the direction of both the York and the McKenzie is away from civilisation, the difficulty of escape is greatly increased, and rendered, indeed, practically insurmountable. escape down either of these rivers to the icy seas in which they empty themselves would be simply to invite destruction; and, on the other hand, to ascend and drag a boat up an impetuous river, interrupted by numerous portages, rapids, and waterfalls, is a feat physically impracticable to an unaided individual, and possible of accomplishment only by the union and organisation of many. The Russian system of planting a convict down on a piece of ground with such assistance in the way of agricultural implements and stock as to give him a fair start for life, would, in such a country as Australia, be simply a premium upon crime. But in the country we are now considering it might be done without injury, for, shut out as the exile would be from all inter-course with civilised society, and guarded by bitter blasts, the most favourable view could not picture his lot as aught but hard. For the worst class of criminals, and for refractory or re-convicted felons, there would be the "hard labour" of road-making, clearing the portages and obstruc-tions to navigation, and, lastly, as in Russia, and in the state of New York, for incorrigible offenders, working in mines. To the well-conducted, on the other hand, might be held out the hope of being removed to the milder climate and the more fertile country around Lake Winipeg, between which and the bleak shores of Hudson's Bay, or the Polar Sea, a chain of settlements might be established, affording all the gradations between a country where wheat grows luxuriantly, and one where potatoes and garden vegetables can be raised only with difficulty—in other words, between a position of comfort and ease and a life of penury and hardship. As a further incentive to good conduct, this class, too. might, as in Russia, be allowed to marry, or to bring their wives and families, if already married, along with them, and thereby blot out one of the darkest stains in the convict system of England.

This is not the time nor the place to enter into the details of the organisation of the scheme I have here very briefly and imperfectly sketched. The principle on which it rests is simple and intelligible, and it has this at least in its favour, that it has been tried elsewhere, and is at this moment in successful operation, while our own system has notoriously and avowedly failed. This ought to be sufficient of itself to induce us to give it, at least, a fair trial.

The locality recommended for the experiment is open to no valid objection, so far as I am aware, and has, on the other hand, many undeniable advantages in its favour.

^{*} The limits of the present paper will not allow of so full a detail of the mineral and agricultural resources of this part of the country, for the support and beneficial employment of a population, as could be wished. The reader is referred to another paper, in this Journal, by the present writer (published March 1, 1861), in which this part of the subject is discussed at great length.



As compared with Australia, the Falklands, and other islands in the Pacific which have been suggested, Hudson's Bay, which is within ten days' steam of England, may be said to be at our very door, and although accessible during a few months only in the year, this is an advantage rather than otherwise, as convicts once settled in the country will be precluded from all possibility of escape—having on one side an ice-encumbered sea, impracticable for navigation during the greater part of the year, and on the other an impassable wilderness of many thousand square miles in extent, cutting off all intercourse with the settlements on the south and west. It is, in fact, a great natural prison, marked by the hand of nature for a penal settlement, and capable of absorbing in its vast area the criminal population of England for centuries to come.

As regards the Hudson's Bay Company, that body has expressed its willingness before a recent Committee of the House of Commons to surrender any portion of the territory under its jurisdiction which may be required for public objects. The company's license of exclusive trade expired in 1859, and the Duke of Newcastle, with wise foresight for the public interests, has declined up to this time to renew it.

The few scattered remnants of the aboriginal population now existing in the part of the country proposed for settlement can readily be removed, and with great advantage to themselves, to the Red River Colony, where there is at the present time a flourishing Indian settlement, composed of families drawn in this way from all parts of the Hudson's Bay territories.

I have heard it suggested as a possible objection that the selection of these territories for a convict settlement might possibly give umbrage to the United States or to Canada. Such an objection can only proceed from those entirely unacquainted with the geography of the American continent. The distance between York Factory and the northern extremity of Lake Superior (itself some hundreds of miles beyond the most advanced settlements in Canada), by the usual travelled route, is 1,385 miles; the distance of the same place from St. Peter's, in Minnesota, 1,894 miles.* The distance of Fort Simpson on McKenzie's River from either of these places, is upwards of 3,000 miles. To talk of the contamination of a convict settlement, separated by such an interval as this, would be, as has been well observed, as " if the people of Odessa were to raise their voices against a penal settlement at Archangel," or those of London to denounce the danger to their morals from a similar establishment in the Crimea, which would, in truth, be less absurd. No such complaint could be raised in earnest, and if raised by way of "cry," it must, with all respect, be disregarded. With reference to the small community at the Red River, the proposal here advocated has been repeatedly brought before them through friends of my own in the colony, and I have never heard anything but approval of it as a measure, which by opening up a market for its productions, is well calculated to promote the prosperity of the settlement in common with the whole of the vast territory, in which it is at present like an oasis in the wilderness, the solitary

* The following table, quoted from an official survey, and given in evidence before the Committee of the House of Commons, on the Hudson's Bay Company, is extracted from their Report, p. 130:—

DISTANCES BETWEEN YORK FAC-	DISTANCES BETWEEN YORK FAC-
TORY AND ST. PETER'S, MINNE-	TORY AND LAKE SUPERIOR.
SOTA.	Miles.
Miles.	From York Factory to Lake
From York Factory to Lake	Winipeg 382
Winipeg 382	
Across Lake Winipeg to	Winipeg river 300
mouth of Red River 300	
From mouth of Red River	of the Woods 175
to Pembina 163	Across the Lake of the
Prom Pembina to St.	Woods 75
Peter's 1049	Thence to Lake Superior 453
10010	
'Total 1894	Total 1385

representative of civilization. The lines of convict settlement I propose to establish do not come near this colony, although supplies might be readily obtained from it, if necessary, at all times without difficulty. The valleys of the Red River and the Saskatchewan, through which lies the great highway of communication between Canada and British Columbia, should be reserved for voluntary migration, and it forms no part of the present plan to send convicts there, although they would of course be available for the construction of any public works which might be deemed necessary, either there or in the contiguous countries of Canada or British Columbia.

DISCUSSION.

Mr. S. REDGRAVE said it was with great diffidence he ventured to obtrude any observations upon the meeting. He had listened with great interest to Mr. Isbister's arguments in favour of Hudson's Bay as a colony suitable for convicts, and he regarded that proposition as the principal point in the paper, as it had not touched upon the question, so far as he had observed, of how to dispose of the convicts upon the completion of their sentences. The Russian system had to some extent been advocated by Mr. Isbister; but if they were to hold out the prospect that convicts were to be provided with a plot of ground, a house, a horse, two cows, and agricultural implements, in addition to exemption from taxation, there would be plenty of candidates for such excellent government appointments, and there would certainly be no lack of convicts. Then, again, under the Russian system, the wives and families of certain classes of offenders were allowed either to accompany them in their expatriation, or to join them after a period of time. He did no know how it was possible, under any system of English transportation, to introduce honest women into the convict settlements; in fact, under any system that had hitherto existed, it had been found impossible to do so. When a number of women were possible to do so. shipped to one of those colonies, all that could be done was to put them together into a sort of barrack, and a convict, upon his good behaviour, might obtain a holiday to go and choose a wife for himself; but how, under the present circumstances, these women could become honest wives he was at a loss to imagine. He considered the whole question was beset with many difficulties. It was very well to talk about the employment of convict labour in the making of roads, &c.; but it was well known that the work done by a convict was only about a fourth of that performed by a feel abourer. When the convict was set to work, his object was to do as little as possible. They must have guards and overseers to watch the convicts, as well as soldiers to protect the civil staff; and in his opinion nothing led to greater demoralisation amongst soldiers than the employment of them in penal colonies, and he believed strong objections against such an employ-ment would be raised by any commander-in-chief. He thought it his duty to bring forward these difficulties, and in pursuing the subject further, many others might be mentioned. Upon the question of the almost impossibility of the convicts escaping from Hudson's Bay, and finding their way to Canada and America, they had had accounts of escapes of convicts effected under difficulties greater than had been shown by Mr. Isbister with regard to Hudson's Bay, and in that way all the evils of a desperate set of men getting loose upon society, evils of a desperate set of men getting 100se upon society, which had always been a subject of complaint in our colonies, might be repeated. The whole question of transportation to a penal settlement was surrounded with grave difficulties. With regard to Hudson's Bay being a suitable colony for such purposes, there was no doubt that the points urged in the paper were worthy of careful consideration; but when they had planted a colony of English convicts there, what were they to do with them when the period of their transportation was expired? There was no means of providing for their future course of life, and they could hardly be established in Hudson's Bay to farm the land. Free colonists had an objection to the employment of liberated convicts, and their object had always been to obtain paid labourers of a different class, whilst to the convict labourer, as he had before remarked, there was but little inducement to work. He would only add, that in the event of a return to the system of transportation of criminal offenders, attention should, in his opinion, be directed to providing them with the means of future existence, and of leading a reformed life after their sentences were expired.

Mr. W. Hawes said he was sure no apology was necessary from the author of this paper for having introduced the very important subject of convict colonisation to the attention of this Society, for he did not know any body of men whatever who were more interested in the proper administration of the penal laws of the country than the members of the Society of Arts. They had property exposed in every way, and at all times, to the depredations of the thief; their personal safety was specially in danger from the necessity which business enforced upon them of being out at all times and in all manner of places, and therefore those present must consider this a very proper paper to be submitted to them, and one in which they must all feel the greatest possible interest. The arguments used by Mr. Isbister were based upon two assumptions; first, that the present convict system had entirely failed; and, secondly, that the only course now open to the country was a return to transportation, in order to dispose of our criminal population. He demurred to both these propositions. He said that other treatment than transportation had not so entirely failed, and they had ample evidence before them that, under proper care and discipline, and under the administration of proper persons, there were means of treating the criminal population in such a manner as to place all notorious and dangerous criminals beyond the pale of society, and only to release those who, after a season of severe penal servitude, had proved themselves able and willing to earn an honest livelihood, after their period of confinement had passed. If it were the fact that those means were practically in existence, then the expense of transporting the criminal population, and all the moral evils attending it, to a place such as had been described to them that evening, and recommended to them by com-paring it with Siberia, was unnecessary, and he believed it would be against the feelings, the prejudices, and the natural instincts of the country that they should endeavour to create a settlement upon British territory upon the principle adopted by Russia in establishing the great penal colony of Siberia. He believed they had only to look carefully at the working of the penal system now in force in Ireland to be satisfied that if the same amount of energy and talent were applied to that of England, the same, or nearly the same, results would follow. In Ireland the criminal population was steadily decreasing. When released from prison after the full period of incar-ceration, they found that the great mass were absorbed and employed, and there was even a demand at the prisons for those who had worked out their sentences; but the reverse was the case in England. Why, then, did this difference exist between Ireland and England? First, he believed, because there was not that conviction in the minds of those in authority in England of the soundness of the principles established and practically carried out in Ireland, which was absolutely necessary to insure success. Moreover, our prisons were conducted upon no fixed principles of penal discipline, but were all more or less subject to the opinions, feelings, and perhaps the somewhat capricious exercise of their powers by the local magiswhich ought to apply to every prison, and be enforced against every person who deserved to be confined for a long period, as having thereby proved himself unfit to be at liberty. In Ireland the system of penal servitude had

succeeded; in England it manifestly had to a great extent failed; in the one case it proved good, in the other bad. In the one case, the criminal population was turned loose upon society after short imprisonments, again to perpetrate other and more aggravated depredations; in the other case, long imprisonments and other checks upon the prisoner afforded him an opportunity of showing his improved character, and his desire to abandon his evil habits, and to gain an honest livelihood. The great object should be to withdraw our criminal population in the earlier stages of crime from society. That was the the earlier stages of crime from society. course which the statesman and philanthropist would pursue, and not by neglect of our pauper or poor children, to leave them to be educated in crime, and then to become fit subjects for transportation. We ought, in the first place, to look to the means of preventing this criminal population growing up, but as that could not be wholly prevented, we ought to treat all those who had been in custody many times as persons dangerous to society, and lock them up; and if that was not sufficient, they ought to endure some bodily punishment. They ought to feel that which they had inflicted upon the innocent part of the population. He held that we had no right to throw into our colonies the refuse population of the mother country, or to deteriorate the morals of our colonists by placing amongst them hundreds and thousands of the vilest of our criminal population, so as to reduce in a great degree the moral standard of the colony to which we sent them. But they had been referred, in the paper, to America and New South Wales as evidences of the success of the transportation system, but he would ask, were there no evidences to the contrary? was the success, as tested by results, so entirely complete? It was now nearly 100 years since they ceased to transport criminals to America, and he would ask whether they might not trace many of the worst phases of the American character to the seeds that were sown by the thousands and tens of thousands of our criminal population who were sent to that country? Might we not infer that that criminal population had reproduced in another generation many of their vices; and was not the deterioration in many respects of the Anglo-Saxon race in America fairly attributable to this vicious element? They could not be insensible to the difference between that race and the population from which they had sprung, and of which we were so proud in this country, and all those who studied the character of our Australian colonies would see, with regret, tendencies to the same vices in those colonies which had been the recipients of our convicts that they saw in America, arising from the transportation for half a century of our criminal population to that country. He said there was every possible reason why they should not transport their criminals, but keep them here under proper regulations, and enforce obedience to the laws of this country, and if the criminal, after ample warning and punishment, still remained disobedient to them, then he should br held in custody, if necessary, for life. By what means, then. was this to be done? They could trace a portion of the evils of the present time to the altered criminal legislature of the last few years. By an Act of only recent standing, criminals who had been convicted five or six times, could, by obedience to prison discipline, obtain the remission of a great part of their sentence, without affording any evidence whatever of their power to resist temptations to crime when out of prison, or the commission of similar offences to those for which they had already suffered. A criminal convicted and imprisoned many times before, might commit a series of smaller offences, or even grave offences, to which he might plead guilty before the sitting magistrate, and might be adjudged for each of such crimes a few weeks' imprisonment, and be let out again improved in crime by his prison associations, and ready at once to fall back again into a fresh career of villiany. On the other hand, if a man's previous convictions were properly considered at the time of his punishment, (and no criminal ought to be sentenced afresh, no matter, com-

paratively speaking, how trifling the crime with which he was charged, without due consideration of his former offences) it ought not to be within the power of any one magistrate, or even of magistrates in petty sessions, to send such an offender to prison for a short period, but he should be obliged to send the case to the assizes or the sessions to be tried by a jury, and the judge should then apportion a sentence, not for the offence immediately committed, but for that and his former crimes, which proved him to be an incorrigible criminal, and a man unfit to be at large, and who, therefore, ought to be confined for a longer period than would be adjudged for the simple crime for which he was then being tried. The next thing required was the perfect certainty that the sentence adjudged would be enforced to the letter, as regarded liberation in England, and even as regarded any other country, unless such an amount of work had been done, and good conduct had been recorded, in favour of the prisoner, as would entitle him to a remission of his sentence, but only upon some fixed principle by which every governor of prisons should be guided, without the matter being left to the caprice of a single officer. They required, also, that a committing magistrate should carefully consider, not only the crime for which the prisoner was brought before him, but the number of times he had been convicted. Thus, instead of remission of sentence following from mere good conduct in prison, decided upon by prison officers upon feeling rather than upon facts, it should follow from that and the amount of work the prisoner had done, and the money he had thereby earned—not work restricted by prison hours, but every man determined to work for a remission of his sentence, should have the opportunity of working longer hours, and thus of proving industrious habits, and what he earned by his industry should form a fund, not to be given over to him in money on his release from prison, to go back to his former associations, but to aid him in emigrating to another country, each man choosing for himself the country he would go The released prisoner would then take his departure from his native country as a free emigrant, holding a testimonial of a character earned by a long period of labour and industry, obtained under most trying circumstances. Upon the present system, however, they introduced the element of hope for a remission of sentence from a mere external and, it might be, hypocritical observance of certain forms and ceremonies which there was no means of properly testing so as to know whether it sprang from the heart, or was only a sham put on whilst in prison, the criminal being well aware that if he went through certain formal observances, and pleased his officers, he would obtain a remission of his sentence.

Mr. ROBERT DAWBARN, as a country magistrate, wished to state that the fact was not, as mentioned by Mr. Hawes, that one magistrate decided cases of the nature he had referred to, for in petty sessions the cases were adjudicated always by two magistrates, and very frequently by more. In London those functions were performed by one stipen-dary magistrate alone. There were three points of view from which this question ought to be regarded. First, the conviction and sentence of the criminal; next, the mode of carrying out the sentence; and thirdly, the result of the corrective influence of the administration of justice. Although justice was retributive, the Christian man neglected his duty if he did not look to the future improvement of those who came under its influence. The primary object of punishment in this country was to effect the reformation of the criminal. In 1853 a great change came over the practice of the law in the abolition of transportation to penal colonies abroad, and the substitution of penal servitude in the home prisons. Judges at assizes, and magistrates in quarter sessions, sentenced convicted prisoners to terms of penal servitude varying from three to four years, and ten years only in cases of extreme atrocity. The introduction of penal servitude at home gave rise to a system of prison discipline by which it was hoped to effect an earlier re-

clamation of those who had fallen into habits of vice, and they had heard from Mr. Hawes the manner in which the system had worked in Ireland; and in reference to the concluding remarks of that gentleman, he would state that when he was at Mettray, in Tours, he was very much struck with the fact that the chaplain of the prison (it being a Catholic country, he was also the confessor) never interfered with the carrying out of the sentence on the prisoners, and he thought that would be a considerable improvement in this country. In relation to the effects of penal servitude, Mr. Dawbarn expressed his opinion that, as far as his experience in agricultural districts went, they had not been generally of an unsatisfactory character, and he knew of several instances in which persons released from penal servitude had become useful members of society. Happily, in the rural districts, they were nearly exempt from those cases of desperate atrocity and violence which had recently occurred in the metropolis, and which were always found to be more prevalent in large towns. He thought it his duty. as one connected with the administration of justice in the rural districts, to make these few observations in reference to what had fallen from the last speaker.

Mr. P. L. Simmonds said he must differ entirely from the opinion laid down by Mr. Hawes, that the policy of, or necessity for, transportation, and the nature of the treatment of our criminal population at home, as dwelt on so much by the last speaker, was a right and proper one to be discussed before the members of a society whose objects were set forth to be the Promotion of Arts, Manufactures, and Commerce. The discussion of this phase of the subject was more fitted for the meetings of the Social Science Congress, or some judicial assembly. But under the title of Mr. Isbister's paper it might, in its colonising aspect, be taken up by the members. He had listened attentively to the address of Mr. Isbister, but he must say he could not fall in with the very sanguine views of that gentleman as to the suitability of the Hudson's Bay territories for the location of convict labour. There appeared to him many objections, among the most prominent of which were that no profitable result could ensue from employing convicts there. They could not be, as in other cases, the pioneers of civilization in clearing forests, forming roads, bridges, and other public works, unless they could be turned to the formation of a convenient overland track of communication and resting posts for the great highway required through our North American possessions to the British Columbia gold fields and the Pacific shore. Mr. Isbister had told them little or nothing of the indi-genous or available resources of the territory. There was no fuel to be obtained, and the woody regions were very limited. Where was the precise spot where the convicts were to be located? Was it to be the "Barren grounds" of which he had spoken, York Factory, or the Valley of the Saskatchewan? It was all very well to point on the map to the vast extent of territory, stretching over thousands of miles, studded with rivers and lakes, and to speak of its admirable capabilities as a prison, but the convicts must be fed and sheltered, and guarded, and employed in Were they to be taken into the service of the some way. Hudson's Bay Company as hunters and fishers, or to become squatters, as suggested, with their wives and families, horses, and cattle in the bleak wilds of North America, where their own energies would certainly not enable them to raise sufficient to support life? The climate would forbid them raising anything for their own support, and all supplies would have to be introduced, like themselves, at great cost. Again, they had heard not a word as to the expense of transport and maintenance of the convict settlement. It was easy to speak of a short sea-passage of only ten days or a fortnight to Hudson's Bay, but this was the smallest part of the entire expense. Allusion had been made to Siberia as furnishing a useful precedent. Labour in the mines was pointed out as occupation for the criminals, but what mineral resources were to be found in the Hudson's Bay Company's hunting countries? t anticipated that a new gold-field would be discovered there for the especial benefit of the most hardened of our criminals? Mr. Isbister had argued that it was impossible to escape from such a country. But surely he must know that what Arctic travellers and the Company's hunters could do, alone and unaided, a determined man, seeking his liberty, and with the woods and rivers at his command, could as easily do, travelling towards the settled districts; and to suppose a sufficient guard could be maintained in such a country was preposterous. It was very questionable, also, whether the Red River settlers, the Canadians who were so desirous of carrying their frontier further north, or the Americans, would be favourable to the introduction of a permanent convict settlement there. He was by no means an advocate for transportation, if any more effectual means of repressing aggravated crime could be found; but he thought that there were many more suitable spots, such as British Honduras, the parts of Western Africa lately pointed out by Capt. Burton, the Falkland Islands, and other localities, to which the deportation of convicts might be more advantageously directed. In making these few observations he had no desire to depreciate the industry and zeal of Mr. Isbister in bringing a country with which he had long been intimately identified before their notice.

Mr. G. W. Hastings begged to offer a few observations upon this paper, and would endeavour to keep as closely as possible to the subject treated of, and avoid the wider question of the details of the treatment of convicts in this country. At the same time, it was hardly possible to deal with a paper which advocated penal settlement for convicts without considering in some measure what the treatment of the convicts themselves ought to be; because, unless it was first shown to be desirable to send convicts to penal settlements, it was idle to argue as to any particular place being suitable for such an object. He must say, with all respect to the author of the paper, that whatever might be the knowledge he possessed of the Hudson's Bay territory, and however interesting the information he had conveyed respecting it might be, yet it was evident that he was not so well acquainted with the treatment of criminals in this country, with the legislation that had taken place upon it, or with the official inquiries which had been made concerning it. some boldness, he thought, Mr. Isbister had cast upon so eminent a statesman as Sir Wm. Molesworth, and those who were associated with him on the committee of 1837, the inuendo of having been agitators to prevent the transportation of convicts to Australia.

Mr. Isbister begged to state that the passage alluded to was a quotation from a writer in the Times newspaper. Mr. Hastings went on to remark that any one who had read the evidence given before the Transportation Committee, and also the evidence given long before that committee made the report upon which the government came to a decision on this question, must come to the conclusion that that decision was a sound one. Isbister had told them it would be desirable to establish a penal colony in Hudson's Bay because it so closely resembled the Russian penal settlement of Siberia. But there were several important differences between In the first place, Siberia abutted the two cases. upon the territory of Russia proper, and therefore could be colonised by others than convicts from the population of Russia; and besides, a great portion of the convicts sent there were not of the class usually sent to our penal colonies. He imagined Mr. Isbister would hardly propose that when Lord Derby came into power he should consign the opposition to the Hudson's Bay settlement, or that the Whigs should deal in a similar manner with the Tories, but that course was the one adopted in Russia. A large portion of the present population of Siberia was descended from the best families of Russia and Poland, and possessed some of the most vigorous blood that was to be found in those countries. The difference was essential for these The great curse of a criminal convict population

was the difficulty of dealing with them on account of their weak moral and physical organisation. The great majority of the convict population were fit for nothing. were weak mentally and bodily, and of depraved habits, and out of such material it was impossible to found a flourishing colony; and he ventured to say their learned chairman, or any other man who had gone on circuit, or had been judicially brought into contact with the criminal population, would bear out the truth of this statement. To tell them that a class of people of that description could be sent into a severe climate like that of Hudson's Bay, as a means of colonisation, was to ignore all the experience that had been obtained on the subject of transportation. If they referred to the speech of Sir George Grey in the House of Commons, in 1857, when he introduced the Bill for penal servitude, they would find that he then stated that one of the chief difficulties they had to grapple with was, that the great majority of persons sentenced to transportation were not fit to be transported at all, and that it was useless to send them out to penal colonies. If that were the case when convicts were sent to the mild climate of Australia, what would be the state of things if they sent them to a climate like that of the Hudson's Bay territory? It would be impossible to send them there in the hope that they could work hard, retain their health, or be of any service to the community. He thought that of itself was sufficient objection against making a penal settlement of Hudson's Bay. But there was another objection against it. Mr. Isbister had said no one who was not entirely unacquainted with the geography of North America would suppose that the convicts could ever make their way into Canada and the United States. He thought that was rather a rash assertion, because it was given in evidence before the Transportation Committee, that a considerable portion of the convicts of Western Australia did somehow or other drift through into the other colonies of Australia, and the great oppo-sition of the colonists of Victoria—who never had any convicts sent to them-was, not that it was proposed to send convicts there, but that they should be sent to any portion of the Australian colonies, on the ground that they would be sure to find their way there, and they did not see why England should inflict upon them lation which she would not keep herself. Upon the subject of transportation itself he would say that there was a large portion of convicts to whom it never could apply; and when they were sent out, the benefit which was expected to this country did not result; we did not get rid of them. When they talked of sending convicts to Siberia, the Russian government sent them there for life; and if it was supposed that the House of Com-mons was prepared to pass, and the Government to sanction, an Act for transporting every person convicted of an offence for life, there might be some reason in the argument for sending convicts to a penal settlement. But they were not generally sent for life. An immense proportion were only for seven years; fifteen was considered a severe sentence, and convicts were continually coming back to this country, not only those whose sentences were expired, but also those whose sentences were not expired. He was himself comparatively young at the bar, but he had seen convicts tried for returning before the expiration of their sentence. The fact was, transportation to penal colonies did not answer the end for which it was established. It would not rid us of our criminal population if it was renewed to-morrow. Instead of reaping the advantage of getting rid of them, we should find them in a few years nearly as troublesome as they were at the present moment. He objected to the whole system of penal settlements, and he would tell them why. In the first place a penal settlement, in the strict sense of the term, was nothing more than a large prison some thousands of miles distant. It was nothing but what they might have in this country under much better supervision, under the eye of the press, the best possible machinery for keeping officials to their duty; of keeping up a great prison than at home. First of all there was the expense of sending the convicts out; then they had to send soldiers as guards and people as warders, and unless they made penal settlements self-supportingwhich had never yet been done-they would have to supply them, if not with food, with most other necessaries. Any one who looked to the evidence given before the Transportation Committee, and saw the expense of the Norfolk Island and Van Dieman's Land penal establishments, would understand what price must be paid for With regard carrying out the transportation system. to the question what was to be done with the convict upon the expiration of his sentence, it was of course easier for him to obtain a livelihood in a country where labour was in demand, than at home, where the labour market was already glutted. What they wanted was to set the convict free in a community where there was independent capital and a demand for labour, and that would never be the case in penal colonies. If they wanted localities in which liberated convicts could obtain a livelihood, let them not be penal colonies, but places where there was capital to encourage the employment of labour, and there were such colonies in abundance; and if it were not for the absurd system of forcing our criminal population upon reluctant communities, he believed Australia and the Cape of Good Hope would have been ready to receive them as colonists. Western Australia now took a number of convicts every year from Ireland, it being understood that only the promising characters were sent, and not those whose reformation was hopeless. For the reasons he had stated he was strongly opposed to penal colonisation. It would not answer the purpose sought, and if repeated would again prove a failure. He called upon this Society, as upon all other similar bodies in the country, to face the difficulty of dealing with this question in a manly spirit, and not to be led away by a temporary panic into measures of error or injustice they would hereafter regret. Let them look at the weak points of the present system, and endeavour to remedy them to the best of their ability, and he was quite sure as efficient means would be found in this country of grappling with crime as it was possible to find in any other quarter of the globe.

Mr. John Dillon thought it somewhat unfortunate that this question should have been discussed this evening almost entirely in relation to one particular aspect of it. It was seldom that he had to differ from his friend Mr. Hawes, but he did so on this matter, inasmuch as he (Mr. Dillon) did not consider that the system of penal colonisation had entirely failed; and with reference to the system pursued in Ireland, of which Mr. Hawes had spoken in such high terms, he did not see that crime had been repressed there in any greater degree than it had been in England. For his own part, he was very much inclined to the system of reformatories for criminalsespecially for the more juvenile class of offenders. He trusted he was not more hardhearted than his friend on this question, but he apprehended the object of criminal law was the punishment of the criminal, whilst the philanthropist looked also for reformatory results from the administration of the law. The forms of indictment, the charges given by judges to the jury, as well as their addresses to the prisoners previously to passing sentence, tended to show that the object of the law was the punishment of the offender, and to deter others from crime; but he should be happy to see the reformatory influence exercised as far as possible.

Mr. Taylog would make one remark with regard to the difference alluded to by Mr. Hawes between the cases of English and Irish convicts. He had been in New South Wale; and having had several convicts in his employ, his own experience was, that the Irish were much more tractable servants than the English; and when the former found that there was a strong power at hand to control them, they were more submissive to their lot difficulty of escape of the criminals, and, nnally, the advantage of having a locality, entirely under the control of the Home Government, where transportation could be carried out for a long time to come, as a permanent system of punishment, and not, as heretofore, as a mere temporary resource dependent on the co-operation of the inhabitants of a distant colony. One gentleman had referred to the fact that criminals did somehow or other escape in Aus-

and, in the next place, it was a much more expensive way of keeping up a great prison than at home. First of all there was the expense of sending the convicts out; then they had to send soldiers as guards and people as warders, and unless they made penal settlements self-supporting—which had never yet been done—they would have to supply them, if not with food, with most other necessaries. Any one who looked to the evidence given before the Transportation Committee, and saw the expense of the Norfolk Island and Van Dieman's Land penal establishments, would understand what price must be paid for carrying out the transportation system. With regard to the question what was to be done with the convict.

Mr. Isbister, having been called upon by the chairman to reply, observed that he agreed with one of the speakers that the discussion had somewhat wandered from the object of the paper, which was not so much to show the best mode of punishing criminals, but—on the assumption that the common sense of the public had by a large ma-jority out of doors, if not in that room, pronounced in favour of transportation,—to point out a territory which appeared to him well suited for carrying out, in a much more complete and permanent manner than had yet been attempted, a comprehensive scheme of penal colonization. It seemed to be forgotten by most of the speakers that transportation was not even yet an obsolete punishment. He must repeat what had been stated in the paper, that after a criminal had passed through the reformatory stage of his punishment in England, it was open to the Government to discharge him on a ticket of leave either at home or in the colonies, Western Australia being unhappily now the only colony available for the purpose. The committees of the House of Commons and of the House of Lords, which sat in 1856, had recommended, to quote the language of one of their reports, a "continuation of the sentence of transportation so far as Her Majesty's dominions may afford safe and proper facilities for that purpose;" and they seemed, so far as he could gather from an examination of the evidence, to lament the want of other suitable places to which convicts might be sent, as Western Australia appeared to be capable of absorbing so small a number. It was from a desire to meet this want that he had brought before the Society the claims of a territory where a new experiment might be made under circumstances which held out greater prospects of success than had hitherto attended our efforts in other quarters. The subject was so wide a one that it was quite impossible, within the limits of a paper to be read and discussed in a single evening, to go into minute details of plans as respected the modes of dealing with the convicts when they reached their destination, the expense of maintaining them, the cost of their supervision and guard, or the resources of each particular district in that immense area of country. These details would form more fittingly subjects for future consideration. For the present he would merely observe, that whether we kept our convicts at home, or sent them abroad, whether we sent them to Hudson's Bay or to Australia, or to some other colony, they would equally require guards, maintenance, and supervision, involving necessarily a heavy expense. He did not profess to find a place where these could be dispensed with, but he was prepared to maintain that the expense in the Hudson's Bay territory would be les than in Australia, while its capacity of absorbing our criminals was beyond all comparison greater. So far, therefore, there was a clear gain in the selection of Hudson's Bay, not to dwell upon the other considerations urged in the paper, namely, the proximity to this country, the difficulty of escape of the criminals, and, finally, the advantage of having a locality, entirely under the control of the Home Government, where transportation could be carried out for a long time to come, as a permanent system of punishment, and not, as heretofore, as a mere temporary resource dependent on the co-operation of the inhabitants

tralia, and therefore there was every reason to believe they could escape easily in Hudson's Bay also. He thought it a sufficient answer to this that the conditions of the two countries were so essentially different, that to reason from the one to the other would be fallacious. We had in Australia-Western Australia especially, a level country, with hardly any deep rivers or lakes to cross, few or no forests to pass through, and, lastly, a climate so mild as to enable a man to live without shelter for as long a period as he could find roots, berries, fruits, game, &c., to subsist upon. In Hudson's Bay, all this was as widely different as it was possible to conceive. First, there was a climate which, during the long and rigorous winter, would be fatal to any one who attempted for any length of time to live in the open air, without shelter; and in the summer there were pathless forests to be traversed, destitute of fruittrees or other means of sustaining life, and a country intersected by numerous deep and impetuous rivers and extensive lakes and marshes. The man who could escape in Australia might undoubtedly make the attempt in Hudson's Bay, but he would undoubtedly perish in the attempt. He had, in a former paper, read before the Society, and published March 1st, 1861, dwelt so fully on the resources and capabilities of the Hudson's Bay territories for sustaining a large population, that it would have been simply a repetition of what he had said, to go over the same subject in the present paper. Those interested in the subject would find that part of the question very fully discussed there, and he would ask them to read the two papers in connexion, as so wide a subject as the resources, animal, vegetable, and mineral, of a territory nearly equal in extent to the whole continent of Europe, could not have had justice done to it in a paper like the present, which took up another part of the subject. He would merely observe that along the line of country he had proposed for convict colonisation, which would be found clearly indicated on the accompanying map, the experience of the establishments of the Hudson's Bay Company, now stationed there, had proved that in parts of the country wheat could be raised, and in others barley, oats, and the harder kinds of grain, while potatoes, turnips, and other vegetables, would grow in all parts not in immediate proximity to the sea, so that there would be no difficulty, such as one of the speakers had apprehended, in raising the means of subsistence. The fact that the Hudson's Bay Company had stations all along the line of communication, which were entirely self-supporting, and which of course could be multiplied if necessary, was the best answer to the objection that convicts settled there would have to be maintained from England. Some assistance they would of course require in the first instance, but any deficiency could be readily supplied from the Red River settlement, where flour and other provisions could be obtained at a much cheaper rate than in this country, and sent on with great ease along the line of water-communication he had described in the paper. He had been quite prepared to find some prejudice against the Russian system of deportation to Siberia, simply because it was Russian; but with all respect to those who urged the objection, this was not an argument. They were not there to consider "prejudices" as such, but whether they were well founded; and he main. tained that if Russia had solved the problem we had failed in, the best thing we could do would be to imitate her. He had pointed out a territory where the system adopted by Russia could be carried out, as he believed. with equally successful results. It might be quite true that transportation to Hudson's Bay would not be what transportation to Australia had been,—the pioneer of free emigration. But against this we should have to balance the advantage that if free emigrants would not be attracted in large numbers to Hudson's Bay to benefit by the labour of the convicts, neither would they, as in Australia, be able to upset, at any time they pleased, our whole system of penal legislation; and that we should have here what we had always desired but had never been able to secure, a

permanent penal colony instead of a temporary one. As for the objections which had been urged that there would be no means of disposing of the convicts after their term of sentence had expired, that they would be attracted by the prospect of grants of land, that there would be no great object of national utility to which their labour could be applied, &c., &c.; there was no answer he could give so effectual as the example he had pointed out, of a great and successful penal colony subsisting for the last two centuries, and likely to do so for as many more, where precisely the same class of difficulties had no doubt arisen, and, as they all knew, had been successfully overcome. There was the thing done, and no arguments he could use would be a more effectual answer to these objections than that. He had in his former paper pointed out an object of very great national importance, namely, the opening up of a communication between Canada and British Columbia, by which our possessions in North America, on the Atlantic and the Pacific, might be more intimately united and consolidated; and here, therefore, not to mention any others, there was a great national undertaking of undoubted utility, in which all the disposable convict labour we had might be absorbed for

many years to come.

The Chairman said it was now his pleasing duty to ask them to authorise him to return their thanks to Mr. Isbister for his valuable paper. He would only trouble them with one or two observations on the subject under discussion. Mr. Isbister seemed to have thought that his paper did not involve the question of penal servitude at home; but it appeared to him (the Chairman) that it did so, and he thought Mr. Hawes was quite in order in seeking to show that, inasmuch as he regarded transportation as unnecessary, it was useless to look out for another colony to which convicts should be sent, and that they could be satisfactorily disposed of at home. that opinion was correct or not, it was not now necessary to inquire; but he thought Mr. Hawes was fairly justified in saying that the punishment at home had failed in producing the results which had been hoped from it. He could not say that secondary punishment at home had been effectual; he thought it had failed in the large majority of cases. Whether that was owing to the imperfect manner in which it was carried out, the imperfections of local administration, or a misconception of the means whereby punishment could be made effectual at home, he could not say; but he differed from his friend Mr. Hawes in the contrast he had drawn between the English and the Irish systems. He thought the Irish system dealt with a different class of criminals to those in England. dealt with rural criminals to a large extent-persons not brought up in the atmosphere of large towns, born and educated in crime. That could not generally be said of Irish criminals, but could largely be said of the English criminals; therefore, the discipline which had been found effectual in the one case, might fail in the other, and that might account in a great measure for the difference of results in England and Ireland. This was in itself one of the most important questions that could be submitted to an English audience. It was only during a very few years that penal servitude had been tried in this country, and that criminals had been discharged after certain periods of imprisonment; yet they saw in that shor! space of time the condition of the criminal population had become greatly worse; that the large towns were more dangerous, and that the present punishments had not been found to be a "terror to evil doers." He had himself occasionally to do with the administration of justice, and only the previous week a woman was brought before him who had been in prison no fewer than fifteen times. She was then convicted of two larcenies. was to be done in such a case? She must either be sent to penal servitude or to the House of Correction again, and that man must be of a very sanguine temperament who thought a person who had been in prison fifteen times would be reclaimed on the

sixteenth occasion. He had been told that the great desire of such criminals was to get into a Government prison, and he was informed by the Chairman of the Middlesex Sessions last week that their warders had been outrageously assaulted by prisoners whose object was to get into one of the Government penal prisons. That did not settle the question, of course, because he was aware the discipline of prisons might be improper, and from the mode in which the criminals were treated such a result might have followed. It was a subject upon which very much might be said. The criminal law of the country had of late years been greatly humanised; they had to deal in the present day with a large amount of sym-pathy towards criminals, and the man who devised the means of making secondary punishments most effectual would confer a great benefit on humanity. He feared if this could not be done recourse would again be had to the punishment of death, a measure which was much to be deprecated. He thought that at the present time this subject was of special interest, and that the Society was particularly indebted to Mr. Isbister for having brought the question so ably before them. He begged to propose a vote of thanks to Mr. Isbister.

The vote of thanks having been passed,

The Secretary announced that on Wednesday evening next, the 28th inst., a Paper by Mr. T. A. Masey, "On the Best Means of Establishing Electrical Communication between Great Britain and America," would be read. On this evening W. R. Grove, Esq., Q.C., F.R.S., will preside.

AWARDS OF MERIT AT INTERNA-TIONAL EXHIBITIONS.

(Continued from page 152.)

In August last the Council of the Society of Arts issued a letter, inviting the opinion of the Jurors, the Commissioners for the Colonies and for Foreign countries, and the principal Exhibitors at the International Exhibition, on the question of Awards of Merit in connection with International Exhibitions; and requesting replies to the questions given below, with the intention of embodying the answers in a public report.

AWARDS OF JURIES.

1.-Are you of opinion that Awards for Merit, by medals or otherwise, in International Exhibitions, are desirable?

2.—State the reasons for your opinion.

3.—Ought Works of Fine Art and Designs to be excluded from the awards?

4.—Can you suggest any better method than the appointment of jurors for making the awards?

5.—Can you suggest any improvement in the constitution or proceedings of the juries?

6.—Is any appeal from the decision of the juries desir-

7.—If you think awards undesirable, can you suggest

any other means by which meritorious productions may be brought to the notice of the public?

8.-Have you any further suggestions to offer on the subject?

The following is a summary of the replies received. The figures attached to the replies correspond with those of the questions:-

SEPTIMUS PIESSE (Piesse and Lubin), Exhibitor, Class IVD. 1. Highly desirable. 2. Men at all times and in XVI.—Does not answer the queries separately, as a

all countries, of every class and grade, delight in honour and awards. Degrees of M.A., D.D., &c., are awards to merit. In the army rewards are given for merit, and vary in value from the corporal's stripe to the field-marshal's baton; so also in the navy, from a first-class boy to the admiral. In political economy it is a rule to reward merit with power and rank. The church gives rewards to meritorious disciples, from a living to a bishopric. In fact our whole actions of life are to work for and receive reward, not in this life only, for we are promised it hereafter. 3. Yes. 4. No, provided (a) that jurors are not pressed to give opinion upon subjects beyond their capacity; hence careful subdivision of articles is very necessary. (b) That no jury consist of less than nine or more than thirteen. 5. The chairman of the jury should be appointed by her Majesty's Commissioners; of the remainder, one-half should be exhibitors, the other half non-exhibitors; all to be nominees of exhibitors, the chairman excepted. 6. The jurors appointed should represent as manufacturers or persons of known ability, the class of goods submitted to their examination; such jury should be known as the trade jury. 7. There should be a jury of each class, having an independent and higher function than the trade jury, and denominated the class jury. The class jury should consist of one-half professional men; the other half merchants, or manufacturers of the articles under their jurisdiction. The professional half should be appointed by her Majesty's Commissioners; the remainder by the trade jury. The principal functions of the class jury should be to form a court of appeal for dissatisfied exhibitors in reference to award of space, &c. Class juries should have the power of awarding the second order of merit. There should be four orders of award or merit. (a) Chevalier, or other title for life, with pecuniary gift when desirable, received direct from the crown. (b) Gold "hoop" award, given by her Majesty's Commissioners, under the advice of the class jury. (c) Silver "hoop" award under advice of trade jury, but the gift of class jury. (d) Bronze "hoop," or trade jury award. Chooses a "hoop" as emblematical of eternity and a distinguishing badge of honour for civilians-medals, crosses, clasps, &c., being already employed as decorations for other qualities of merit. Each "hoop" should bear an appropriate inscription. To point out four exhibitors in the present instance (1862) as fit recipients for these awards names-H. Bessemer, for his pneumatic steel and iron manufacture—a Cheva-lier; M. Carré, for his ice-producers—gold "hoop"; — Young, for his paraffin; — Perkin, for his coal dye—silver "hoop"; J. Morgan, for his printing-block producing machine—bronze "hoop." All these persons receive medals of equal value in the present Exhibition. 8. All articles of a similar kind or manufacture should be placed together, come from what country they may. primary division of space should not be geographical but commercial; it is absurd to see toilet soap and reaping hooks side by side because they come from Prussia, or tobacco-pipes, and pianofortes in juxtaposition, as both of Austrian work. Trade courts should be first formed and then subject to geographical division; we should then find in the Ceramic Court Roman pottery, English pottery, Dresden pottery, Sévres pottery, &c., &c., &c., and be able to compare them. Processes should be allotted space in the nave and transept on each side. Machinery should be absolutely divided into machinery at rest, machinery in motion, steam; machinery in motion, electrical; machinery in motion, treddle or foot; machinery in motion, spring. Carriages on wheels, when used for passengers of all denominations, rail or road, should be placed together. A distinct space on the ground plan should be left to divide every class so as clearly to show the jurisdiction of the class jurors and the materials of the class. All organs in the galleries; all bells hung up aloft; no waterfountains within the buildings, but in courtyards, &c.; no trade trophies out of their class space.

WILLIAM POLE, F.R.S., Juror and Reporter, Class

general answer best expresses his views on the subject. Cannot think that any awards are necessary as regards the interests of the exhibitors, believing that they are sufficiently rewarded by the facilities for exhibition, which cannot fail to bring their merits before the public in a way eminently calculated to be honourable and useful to them. Under the system of medals, if they are few in number, and intended to confer great distinction, it is not easy to exclude altogether the effects of interest and partizanship in the decisions; judgment often becomes difficult; and the awards are seldom accepted with satisfaction. On the other hand, if the medals are very numerous they convey no real distinction, their effect being rather to damage the minority who are omitted than to benefit the majority who are rewarded. But, assuming that the awards might be abolished altogether as regards the exhibitors, conceives that, when the Exhibition has a national character, the authorities have a duty to perform as regards the public, which should lead to some expression of opinion on the objects brought together. The object of such Exhibitions is, as the writer takes it, not so much to accommodate exhibitors (in which case they would only be huge bazaars), as to spread general information on the state and progress of the arts and manufactures; and since the ideas derivable from any individual inspection of such a gigantic collection must necessarily be very limited, the public may reasonably expect to be put in possession of some official account of the contents and results of the Exhibition, forming a critical and descriptive summing up, so to speak, of the whole, which should be prepared in an authoritative way, by parties competent to the task, and independent altogether of the exhibitors themselves. This object might be sufficiently attained by a series of official reports analogous to the present jury reports, but having no reference to any awards to If such reports were drawn by competent parties, with due care, judgment, and impartiality, they would answer every public requirement, while all the difficulties of medals, and all the cumbrous and uncertain means for effecting their awards, would be done away. This plan would carry with it, collaterally, a real "honourable mention" of any merits shown, which would doubtless be of advantage to the meritorious exhibitor, but which would be less liable to dishonest abuse for mere puffing purposes than a direct formal award. The appointment of the parties to make these reports would, of course, require much care. The exhibition would be divided into classes, as at present, and a committee of about three well-qualified persons, to arrange the report for each class, would suffice. But the writer has a strong opinion that they should be fairly paid for the time they devote to the work, and fully reimbursed for their expenses, without which he cannot conceive that the efficient services of competent men could be secured, or the responsibility thrown on them which they ought to bear. The system of honorary, irresponsible juries does not work well. The British jurors appointed for the Exhibition of 1862 were, in most cases, gentlemen much occupied in business, whose time was of so great value, that, however desirous to fulfil their duties as jurymen, they could scarcely be expected to subject themselves to the heavy pecuniary tax, both by loss of time and expenses out of pocket, which constant attendance for two or three months would have entailed upon them; hence the attendance of British jurors was generally irregular, and the awards fell chiefly into the hands of the foreign members, who, being here expressly for the purposes of the Exhibition, were able to devote to it their whole time and attention. Sees no reason why works of art and designs might not be reported on in the way he proposes. Thinks also that exhibitors who feel themselves aggrieved by any official announcement, whether of awards or in the shape of a report, should have the power of remonstrating, first to the adjudging body, and ultimately, if necessary, to some higher authority, but if the reporters were paid and re-

sponsible, as proposed to make them, this would form the best guarantee for the fairness of their proceedings.

Lord PORTMAN, Juror, Class IIIA.—1. No. 2. Experience as a juror. 6. Certainly not. 7. More space. 8. That the whole subject should be carefully discussed by experienced and unprejudiced men.

E. RAWDON POWER, Commissioner for Ceylon.—1 and 2. As far as European Exhibitions are involved, awards, &c., in International Exhibitions, are out of place, and quite unnecessary, and the community at large can hardly require (even if juries do their duty) landmarks of this character to guide them; yet, as regards an Asiatic colony, such as Ceylon, he thinks that such awards, as far as native exhibitors are concerned, are of use and should be continued. Honorary distinctions are much coveted by natives; at some future period such adventitious stimulus may be unnecessary, and may be abandoned with advantage. 3. Should be excluded. 4. The jury machinery of the present International Exhibition, it would appear, is faulty—giving as an illustration the following fact:—The Government of Ceylon directed that the agronomical map of that important colony should be prepared in the colony, and sent to England for the Exhibition; this service was most admirably performed by Captain C. Simm, R.E., the Surveyor General of Ceylon, and his Departmental Staff, and affords a complete history of thr present state of the colony in reference to cultivation, roads, &c., &c. The map is much admired by the public, and admitted to be one of the best in the Exhibition—certainly the best that has been sent from any of the colonies—but its existence has been entirely ignored by the jury; their attention has been invited to the omission, but up to the present time without effect. 5. If awards for merit are to be continued to native exhibitors from colonies and from the continent of India, it would be desirable that at least one member of the jury should be remunerated for his services; this would ensure due attention and regularity-gratuitous services especially are, as a general rule, inadequately performed. 6. In cases of omission, or misconception of the facts, an appeal should exist to the Commissioners, with the view of requiring the reconsideration by the jury.

J. PRESTWICH, F.R.S., Juror and Reporter, Class IIIc. Remarks chiefly based upon the experience gained as juror at the present Exhibition in Class 3, Section C-Wines and Spirits. 1. Awards for merit by medals, &c., are not desirable. 2. Firstly, the incompleteness and haste of the inquiry. Jullien, in his "Topographie des Vignobles," enumerates 2,900 growths of wine, a number, no doubt, considerably increased since that time (1822). We have no means of knowing the number of proprietors in each area, but it must, in most cases, be very large. Taking even 20, we should have 58,000 proprietors, who may hold in stock the growth of one or more vintages, and whom it may suit, as was found often to be the case, to exhibit samples of several; in some cases as many as 20 sorts. Supposing two to be selected by each exhibitor, the number of specimens that might be brought forward in more complete competition would be 116,000. The number of growers actually exhibiting on this occasion is about 1,500,* and the number of samples to be examined may amount to about 6,000, which, large as it is, represents but partially the great interests concerned. If, again, in each class or district the exhibitors included the principal producers, the jurors might form an approximate estimate of the relative value of their samples, but the series is never complete. Sometimes no first or even second-rate house exhibits, and there is then a tendency for the awards to fall on produce which in fair open market would not be considered deserving of any distinction. Instances a case in which one important district is represented by only 20 exhibitors out of probably 200 houses, and amongst these 20 there is not one leading

^{*} In spirits and liqueurs there are about 1,100 exhibitors.

house whose wines command the best market prices. In another instance a leading branch of the wine trade, embracing 30 shippers of note, was represented by only 3 exhibitors of first rank. With respect to the time allowed to form a judgment, even on the fraction of the general produce exhibited, it is a physical impossibility to grapple with a task of such dimensions within the time allowed to the jurors, or even were that time extended to the whole period of the exhibition. The wine jury at once adopted the plan of forming sub-sections so as to divide and lighten the labour; but even with this limitation the number of samples to be tasted daily was such that no one could pretend to form an accurate and sound opinion on all the various wines under such circumstances, whatever may be the care and attention he might bestow on the inquiry. Secondly, the irregu-Secondly, the irregularity of production. Looking at the various countries and climates from whence our supplies of wine are derived, it necessarily happens that a year good in one country will be bad in another; therefore, the exhibitors of wine ordinarily of equal value and quality in two countries, will compete on an unequal footing where they are limited to the same vintage or even two or more successive vintages. Mentions this merely as a minor difficulty. The third and most serious objection is, that the public, who have not the same means as the jurors of knowing the great allowances to be made, are apt to attach a definite and certain value to the awards, to consider them as indicating a relative superiority over such products as are not so distinguished, whereas, it is evident that, besides the liability to error on the part of the jurors from the causes before named—the partial nature of the exhibition—there exists a reluctance or indifference to exhibit on the part of the best makers or growers. Consequently the awards necessarily altogether fall in many cases to second and third-rate products; and in some cases where the district produces only ordinary products, the best of these may obtain an award, although compared with products of similar value from another district they would show an inferiority. This brings us to another question which further complicates the subject. merit of a wine will depend upon growth, care in making, age, and care in keeping. Each of these essentials has a definite money charge, and the wine has greater or less excellence according to its share in these conditions. It is easy, therefore, for a grower, regardless of expense, on selecting a particular vintage, to excel in some particular class, or on some particular occasion, without being able to maintain that superiority. Only in some instances were the jurors made acquainted with the prices of the wines and spirits, and without this important element, it does seem to be impossible to decide whether the products are such as to deserve or not a demand, for after all the "awards of medals," and "hon-orary mentions," may be supposed to indicate to the public the selection they may safely follow. Confesses that his experience on the occasion of this Great Exhibition would lead him to disregard in most cases all such marks of distinction. With regard to wines, should first look to general repute and quality; secondly to price; and thirdly to keeping qualities. Of the last two elements, the jurors have no means of judging, and therefore their decision must rest upon an arbitrary basis—one which can never be used in actual life. Nor have the jurors any knowledge as to whether the sample exhibited represents a stock which can be maintained and kept up, or whether it is a small exceptional parcel, made on some particular occasion or on some especial vintage, not available for purposes of supply or trade. It is easy, with such samples in the cellar, for any exhibitor to obtain a medal, while at the same time his general stock used for daily trade possesses no exceptional merit, or may even be of inferior quality. A cognac house, for example, might have exhibited a sample of brandy 50 years old, and as the merit of this spirit depends much on age, it would

this age might have been limited to half-a-dozen bottles and, irrespective of this particular sample, the ordinary trade stock of the house might be but of third or fourth quality. Gives this illustration because it was to his knowledge nearly occurring. In wines has reason to believe it occurred not unfrequently. One sample was brought before the jurors said to be 100 years old. It was good and well kept, but the quantity must of course have been trifling, and to whom were we to award the medal, the proprietor who had kept it, or, if there be merit, does it not rather attach to the original grower? In short, there are so many reasons to prevent the jurors forming a correct judgment, so many causes of inequality, such an absence of fixed data, and notwithstanding the actual magnitude of the exhibition, hiatuses so great in many of the groups, that the whole is inadequately represented and the conclusions partial and entitled to but a very secondary value. Regrets, in fact, that such conclusions should go forth to the public as deliberate and complete judgments, for such, from inevitable causes, he is satisfied they cannot be. At the same time the public, who cannot be aware of the attendant circumstances, attaches weight to their judgments, and may be led to form very erroneous conclusions, in some cases from the absence of medals, in others cases from their presence. Nor does it seem that the investigation has had the advantage of making known new, or little known, growths or sources of supply. Wines of well known growths and use have obtained the greater number of medals, and the others are wines which are known and appreciated in their own districts or countries, but are not likely or worthy from distance, small quantity, or other causes, to obtain a foreign demand. Although the preceding observations are made with reference to the exhibition of wines and spirits, the writer believes they will apply in some measure to most articles of food. Should also be disposed, for the reasons assigned in answer to No. 7, to extend them more generally. Many things are difficult to judge of, especially philosophical instruments, which in most cases require time, use, and careful comparison for their due estimation. 3. If works of Fine Art and Designs are exhibited, they ought not to be excluded from awards. On the contrary, considers, if awards are to be made, that such works, being the immediate production of the exhibitor, and depending solely on his own skill and ability, admit of an easier estimate than goods where other elements, such as seasons, public taste, and collateral aid are concerned. 4. No suggestions to make. 5. Suggests that a clerk be attached to each jury to copy letters and rough notes, enter minutes, &c.; the time of the jurors being fully occupied, their attention is apt to be distracted by these necessary details, which also are in consequence apt to be neglected. 6. Any appeal from the decision of the juries is undesirable. At the same time the writer is satisfied that great oversights are some-times made. 7. The public is the best judge of any meritorious productions, and wherever such exist, from the active intercourse now established by railway and post-office, and the keen competition among men of business, they can hardly fail to become known. Delays may occur, but the object is attained with far greater certainty than can be hoped for by the opinion of the few, and the irregular and partial, though quicker, operation of jury awards. Not but that there are cases where awards are useful in detecting obscure and hidden merit, but the machinery appears too liable to error, too cumbersome, and too costly for the gain effected, while in many cases it is a mere work of supererogation. For example, in Jamaica there are 178 exhibitors of rum and liqueurs, and the samples embrace almost all the trade marks. But these marks are all perfectly well known, and their value estimated to within 1d. per gallon in the Mineing-lane market. This known market value of the different marks would be a safer criterion than the unavoidably hurried examination of single samples, probably obtain a medal. At the same time the stock of although the jurors were as competent as they were just and impartial, for, besides the hurry, it is to be observed that single samples do not give the value of particular parcels of rum; the different puncheons of the same mark will often differ, as will also different shipments of the same mark, the actual value and position of any given mark being established by the experience of successive shipments through a number of years. This, in fact, is the case with wines and most other articles of trade. It is not one shipment or one year that suffices to establish the value and merit of any produce. It is the capability and skill of establishing and maintaining a permanent superiority, and such superiority needs no medal to secure a deserved attention and rightly apportioned and remunerative demand.

WESTLEY RICHARDS (W. Richards and Co.), Exhibitor, XIc.-1. No. 2. The difficulties in the way of making proper awards are so great, owing to the variety of tastes and the conflict of opinions, that it is next to an impossibility to come to a just decision on the merits of the various articles exhibited. Therefore, better to make no awards, but to leave the public to judge. By medals the public are often misled rather than assisted; advertising shopkeepers get up things for exhibition-not fair samples commonly produced, and use the medal for purposes of advertising. The medal is of little or no value to the manufacturer of established reputation. 3. Of the two prefers giving medals to works of art rather than to manufactured goods, but sees no reason for pronouncing an opinion upon them, as they speak for themselves. 4. No. 5. No. 6. Thinks there would be no harm in an appeal if good cause be shown. 7. Cannot, unless there were some large permanent building where manufacturers were allowed to exhibit their goods, and none were permitted to exhibit except those whose ordinary productions were of undoubted excellence, and the firm might be relied upon for supplying goods equal to their patterns. There would be many difficulties in carrying out an arrange-ment of this kind, but if it could be done it would facilitate the operations of purchasers, particularly of foreigners.

R. RIDDELLS, Juror, Class IVc.—1. Yes. 2. Causes emulation and stimulus to exertion. 4. No. 5. Each class of jurors should have a paid clerk or secretary to attend and register the proceedings; also, each class of jurors should have a special and convenient room set apart for it to meet and deliberate in, and a sufficient time for such deliberation before sending in the reports. No decision to be final unless a majority of the jurors are present; and no person should be allowed to accept the appointment of juror who is unable or unwilling to give up his time to the performance of the duties he is necessarily bound to perform. 6. Only if it can be clearly shown that the exhibitor has been inadvertently passed over.

EUGENE RIMMEL, Juror, Class IVD., and Exhibitor in Classes IVD. and XVII.—1. Yes. 2. They stimulate industry, and many of the most important exhibitors would not go to the trouble and expense of showing their goods, were it not in the hope of obtaining some reward. 3. Works of fine arts and designs might receive medals, but they are not so necessary for artists as for manufacturers. 4. No. 5. The election of jurors by the exhibitors themselves, as it was done in the British Section, is the very best mode of appointment, and it would be highly desirable that foreign Commissions should adopt the course. 6. No appeal, unless the exhibitor can prove satisfactorily that his goods have not been examined. 7. See reply to 1. 8. In the present Exhibition some juries were divided into sections, each section having the power of deciding on awards to be made, but their decisions were submitted for confirmation to a general meeting of the class. It sometimes happened that their awards were overruled by a majority composed of persons who knew little or nothing of the article examined. Suggests as a

by lot should re-examine the articles in question, and their decision should be final. The same plan should be adopted when an award is proposed by the majority of the class without the sanction of the section to which It belongs. Three distinctive sorts of awards are desirable. A first-class medal for new and really meritorious inventions, a second class medal for excellence of manufacture, and an honourable mention for ordinary merit. The proportion of medals granted in the present Exhibition too large, thereby reducing their value.

(To be continued.)

Proceedings of Institutions.

BACUP MECHANICS' INSTITUTION.—The twenty-fourth anniversary of this Institution was celebrated by a soirée on the 2nd of January, when there was a very large attendance. LAWRENCE HEYWORTH, Esq., President of the Institution took the chair, this being the twenty fourth occasion, without intermission, that he has occupied this honourable position. Mr. Delavanti gave some of his choice musical selections, and was assisted by Miss North, of the Leeds and York concerts. Mr. Andrews presided at the pianoforte. By the kindness of Col. Munn, the band of the 4th Lancashire Rifles also attended. Mr. Newpears that the Institution receives that support and encouragement from the public which enables it to maintain and even to extend its character for usefulness, although it is to be regretted that the wide-spread depression which prevails, in consequence of the cotton famine, has hindered the progress of those improvements in the various departments which the directors have long and anxiously laboured to accomplish. The treasurer's statement shows that the expenditure for the year exceeds the income by the sum of £29 10s. 5d. This arises partly from a diminution in the receipts of the day-school, owing to the inability of many of the scholars to pay the usual fees; but princi-pally from a great falling off in the amount received for the use of the hall. Several gentlemen, however, with a liberality which is deserving of commendation, voluntarily commenced a subscription for the purpose of liquidating this debt, and several donations have been received. Notwithstanding the great depression which exists, the members' subscriptions are in excess of any previous year; a result which proves the high esteem in which the Institution is held, and the anxiety of the members to give it their countenance and support through these trying times. A course of Wednesday evening lectures and entertain-ments was inaugurated in October last, and these have hitherto been well attended, and on the whole have given satisfaction. The series will extend to the last Wednesday in March. The following is a list of the lectures, &c., in the order of delivery:—W. P. Roberts, Esq., of Manchester, "Jerusalem and the Holy Land," two lectures, illustrated by views, flowers, plants, &c.; Rev. G. Hoade, of Hindley, "An Evening with some of our English Poets;" Rev. Thos. Lawson, of Bacup, "The Crusades," music by the Tonic Sol-fa Class; Mr. Thos. Newbigging, of Bacup, "The Chemistry of Water," illustrated by experiments; David Morris, Esq., of Manchester, "Lancashire Poets and Poetry," musical illustrations; J. M. Whitehead, Esq., and Company, of Bury, "Two Hours of Music, Mirth, and Magic;" Mr. D. W. Greenhalgh, of Stubbins, "The Air we Breathe," illustrated by experiments; Robt. Crossland, Esq., of Bury, "Lord Brougham, the Orator and Statesman;" Rev. Thomas Lawson, of Bacup, "Books and how to read them." The following remain to be delivered:-Rev. J. Swann Withington, of Rawtenstall, "A Trio of Great Men of our Nation,remedy, that in the event of the awards of one section Cromwell and Government, Newton and Philosophy, being disputed by the others, three or four jurors drawn Milton and Poetry;" Mr. H. P. Meaden, of Haslingden,

"Combustion and some of its Phenomena," illustrated by experiments; David Thomas, Esq., of Bury, "America, Past and Present;" B. Lee, Esq., of Manchester, "Readings from the Poets and other Authors;" Rev. W. H. C. Anson, of Clough Fold, "The Brain and Nervous System," illustrated by drawings and casts; Mr. A. Stansfield, of Todmorden, "Electricity," illustrated by experiments; T. T. Wilkinson, Esq., F.R.A.S., &c., of Burnley, "The Popular Customs and Superstitions of Lancashire;" Wm. Popular Customs and Superstitions of Lancashire;" Wm. Mitchell, Esq., of Waterfoot, "Athletic Sports;" Thomas Baldwin, Esq., C.E., of Bury, "The Steam Engine;" Adam Fletcher, Esq., M.D., of Bury, "The Marvels of the Invisible, or an Evening with the Microscope," illustrated by microscopic specimens; Joseph Chattwood, Esq. of Bury, "Readings from an Old Manuscript," illustrated by geological specimens. To the various gentlemen who by geological specimens. To the various gentlemen who have so generously placed their time and services at the disposal of the Committee, and also to the musical friends in the neighbourhood who assisted at several of the meetings, the sincere thanks of the directors are most gratefully accorded. The state of the funds has prevented the directors from making any very important additions to the library. Since last report 38 volumes have been added. The issue and re-issue of books during the twelve months is as follows:—1st quarter, 2,115 volumes; 2nd quarter, 1,863 volumes; 3rd quarter, 1,175 volumes; 4th quarter, 1,546; total, 6,699; being an increase of 25 per cent. on last year's circulation: The newsroom was enlarged and otherwise improved at the beginning of the year, and con-tinues to be well attended. The directors beg to acknowledge with thanks the receipt, gratis, of books, news-papers, and magazines from the president and other gentlemen. The average attendance at the evening classes, male and female, during the past year, is lower than the attendance for 1861. This result, the directors have reason to believe, is entirely owing to the inability of many of the pupils to continue their subscriptions. At the examinations which have taken place during the year, in connection with the Society of Arts, and East Lancashire Union of Institutions, the members of the Bacup Mechanics' Institution have achieved a fair share of success; especially when it is recollected that this is their first essay in the one, and only their second in the other. At the local examinations in March last, prizes to the value of £7 were awarded to the successful candidates. The following special prizes, annually given by the gentlemen named, are open for competition in the classes:—Sam. Hall, Esq., for general proficiency, £1 1s.: Henry Maden, Esq., grammar and composition, first prize, £1 1s., second prize, 10s. 6d.; Dr. Worrall, writing, £1; J. H. Sykes, Esq., £1 1s. During the year various improvements have been effected in the day school, which have materially added to the comfort of the scholars. The attendance at present is large, and care is taken to provide such instruc-tion as shall be useful to the pupils in future years— The Chairman said it had afforded him very much pleasure to listen to the encouraging report which had been read, for at a period when many of our labourers did not get less wages but frequently got none at all, it was very gest less wages dut in quarty so in that the institution had been kept up in its present position. It was exceedingly important that they should not only excel in the acquisition of knowledge, but that they should endeavour to turn that know-ledge to practical effect. In the course of his address the chairman especially pointed out the value of a knowledge of political economy and kindred subjects to the working classes. He then proceeded to distribute certificates which had been obtained from the Society of Arts. He eulogised the young men for the proficiency they had made in their studies. Mr. TATTERSALL, of Accrington, moved the adoption of the report. Mr. Thos. BAZLEY, of Manchester, next addressed the audience, and WAS followed by Mr. BARNETT BLAKE (Agent to the Yorkshire Union), Dr. WATTS, and other gentlemen.

MEETINGS FOR THE ENSUING WEEK.

Mon. ...R. Geographical, 83. Proposed route to Siam across the Isthmus of Kraw, by Captains Fraser and Forling. Communicated by Dr. Duncan Macpherson, M.D., F.R.G.S. 2. Mr. Lawrence Oliphant, "Visit to the Island of

Entomological, 7. Annual General Meeting. British Architects, 8.

British Architects, 8.
Actuaries, 7.
Medical, 8½. Mr. W. C. Calthorp, "Spontaneous closure of the axillary atery after division (by a gun-shot wound), with final recovery of the patient."
Medical and Chirurgical, 8½.
Civil Engineers, 8. Renewed discussion on Mr. W. H. Preece's Paper, "On Railway Telegraphs, and the application of Electricity to the Signalling and Working of Trains."
Zoological, 9.
Royal Inst., 3. Professor Marshall, F.R.S., "On Animal Mechanics."
Society of Arts. 8. Mr. T. A. Masey, "On the best means

Mechanics."

Wed. ...Society of Arts, 8. Mr. T. A. Masey, "On the best means of establishing Electrical Communication between Great Britain and America."

Archæological Association, 8½. 1. Mr. Madden, "On Ancient Literary Frauds and Forgeries." 2. Mr. Turner, "On Sepulchral Discoveries at Stapleford Tawney Church, Essex." 3. Mr. Syer Cuming, "On the Discovery of Roman Remains at Combe Wood, Bath, and Exhibition of the Antiquities found by Mr. Geo. Cruickshank."

THURS...Royal, 8[‡].

Antiquaries, 8[‡].

Royal Inst., 3. Dr. E. Frankland, F.R.S., "On Chemical Affinity."

Philosophical Club, 6.

Artists and Amateurs, 8.

Philosophical Club, 6.
Artists and Amateurs, 8.
Fri......Royal Inst., 8. His Eminence Cardinal Wiseman, "On the Points of Contact between Science and Art."
R. United Service Inst., 3. Lieut.-Colonel Alexander Strange, "Telescopes and Opera Glasses for use in the Field or at Sea."
SAT......Royal Inst., 3. Mr. W. S. Savory, F.R.S., "On Life and Death."

PATENT LAW AMENDMENT ACT.

APPLICATIONS FOR PATENTS AND PROTECTION ALLOWED.

[From Gazette, January 16th, 1863.]

Dated 1st September, 1862.
2422. J. H. Johnson, 47, Lincoln's-inn fields—Imp. in the manufacture of braid, and in machinery or apparatus employed therein. (A com.)

Dated 20th September, 1862. 2581. B. Hotchkiss, New Haven, U.S.—Atmospheric trip hammers.

Dated 17th October, 1862. 2804. H. Wickens, 4, Tokenhouse-yard, Bank-Imp. in machinery for making nails. (Partly a com.)

Dated 1st November, 1862.
2959. W. E. Newton, 66, Chancery-lane—Improved apparatus for drying grain and other substances. (A com.)

Dated 10th November, 1882.

3027. J. B. Savoine, St. Pierre, near Calais, France—A kitchen range adapted for cooking, warming the apartments, and generating gas for the use of private families, hotels, or gentlemen's country seats.

Dated 29th hovember, 1862.
3203. T. Evans, Cross street, Abergavenny, Monmouthshire—Imp. in coverings for the leg and thigh known as antigrophilos.

Dated 8th December, 1882.

3291. J. Hilliar, Balsall-heath, Worcester—Imp. in ventilating, and in the exclusion of dustor draught, insects, or other animals from apartments, carriages, or other confined spaces.

Dated 10th December, 1862.

3312. A. P. Price, Lincoln's-inn-fields—Imp. in the manufacture or production of blue colours. (A com.)

3313. D. Chalmers, Dandee—Imp. in the preparation or manufacture of textile materials, and in the machinery or apparatus used therein. therein.

Dated 17th December, 1862.
3374. T. C. Barraclough, Manchester—Imp. in machinery for spinning, twisting, and rolling tobacco. (A com.)

Dated 22nd December, 1862.
3411. F. C. Bakewell, 6, Haverstock-terrace, Hampstead—Imp. in transmitting and receiving communications by means of electricity.

Dated 23rd December, 1862.
3421. C. Pieper, 10, Alma-place, West Gorton, near Manchester—
A new improved governor for steam engines, turbines, water
wheels, and other machinery with valvular arrangements, to
regulate the speed of the same.

3428. J. Whitley and J. W. Burton, Leeds—Imp. in the construction of the permanent way of railways, which improvements are also applicable to railway wheels.

- Dated 24th December, 1862. 3431. S. Haslam and A. Eatough, Bolton-Imp. in machinery or apparatus for preparing cotton or other fibrous materials to be

spun.

3433. J. Broadbent, Manchester, and J. Robinson, Latchford, Warrington, Cheshire—Imp. in machinery for opening and cleaning cotton and other fibrous materials.

3435. A. P. Tronchon, 4, South-street, Finsbury—Some imp. in the construction of fire-arms.

3437. W. C. Galloway, Glasgow—Imp. in pianofortes.

3438. W. Henderson, Glasgow—Imp. in obtaining iron and steel from certain ores and residual products.

3439. W. Clark, 53, Chancery-lane—Imp. in the means of applying heat to the feet in boots, shoes, and otherwise, part of which improvements is applicable to other heating purposes. (A com.)

com.)
3441. J. Fairless, Forth Banks, Newcastle-upon-Tyne—Imp. in apparatus or machinery for milking cows.
3443. E. Stevens, 139, Cheapside—Imp. in machinery for preparing dough and paste suitable for making bread, biscuits, pastry, cakes, and similar articles.
3445. J. Lord and W. Lord, Bolton—Imp. in machinery for fluting materials.

materials.

3447. D. G. Hope, Grays, Essex—Improved machinery for obtaining and applying motive power.
3451. R. Knox, Swinton street, Gray's-inn-road—Imp. in the manu-

facture of metallic pens.

Dated 26th December, 1862.
3452. W. Clark, 53, Chancery-lane—Imp. in fire arms. (A com.)
3453. C. F. Varley, Fortess-terrace, Middlesex—Imp. in electric telegraphs.

Dated 27th December, 1862.
3457. M. F. A. Courtois, Paris—Imp. in wax or other candles and

3459. J. Petrie, Rochdale—Imp. in slide valves for steam engines.

Dated 29th December, 1862.

3461. J. G. Taylor, Paris—Imp. in dress fastenings, and in the ornamenting thereof.

3463. J. H. Riddell, 155, Cheapside—Imp. in stoves.

3465. F. Tolhausen, 17, Faubourg Montmartre, Paris—The use of petroleum or coal oil as fuel, and also for the machinery and apparatus to be employed for this purpose. (A com.)

3467. C. E. Wilson, Monkwell-street—Imp. in articles of wearing apparel for the neck.

- Dated 30th December, 1862.
 3470. J. Johnston, Pinstone street, Sheffield—An improved surface refrigerator.
 3471. J. Robson, jun., South Shields—Imp. in ornamental fittings for
- of domestic store grates.

 3473. H. A. Bonneville, 24, Rue du Mont Thabor, Paris—Imp. in the manufacture of saddles. (A com.)

 3474. F. B. Anderson, Birmingham—Imp. in watches and other time
- keepers. 3475. W. Bowser and H. Bowser, Glasgow—Imp. in coating or protecting iron or steel with another metal.

 3177. J. E. Carter, 3, Brownlow-mews, Gray's-inn-lane—Imp. in
- chimney tops.

 3480. C. Beslay, 11, Rue Menilmontant, Paris—Imp. in steam engines.

Dated 31st December, 1862. 3482. W. B. Adams, Holly Mount, Hampstead—Imp. in railways and

- tramways.

 3484. J. S. Smith and J. Hardmann, Britannia, near Bacup, Lancashire—Certain imp. in power looms for weaving.

 3486. W. Clark, 53, Chancery lane—Imp. in the arrangement of the parts of railway trains, and in the application of power for their propulsion. (A com.)

Dated 1st January, 1863.

4. M. E. Bowra, Upper Norwood, Surrey, and A. E. Francis, 10, Tokenhouse-yard—Imp. in the manufacture of elastic fabrics.

Dated 2nd January, 1863.

- Dated 2nd January, 1863.

 12. W. A. Distin, Taylistock-row, Covent-garden—Imp. in pipes for smoking tobacco or other herbaceous compounds.

 14. C. Eyland, Walsall, Staffordshire—An imp. or imps. in the manufacture of buckles.

 16. A. Bamford, Belle Flat. street, Richard. street, R. Blomley, Taylor-street, Whitworth-road, R. Taylor, 67, Manchesterroad, and J. Lett, 9, Water-street, Rochdale—Imp. in looms for weaving. for weaving.

- 18. W. H. Muntz, Milbrook, Hants-An improved method of at-A. Multz, Milrowa, Haits—All improved method of attacking sheathing to iron or other vessels.
 J. E. Dowson, 33, Dowgate-hill, Thames street—Imp. in the manufacture of wrought metal piles, columns, and shafts.
 A. S. Bolton, Birmingham—Imp. in the manufacture of wire.

22. A. S. Bolton, Birmingham—Imp. in the manuscture of wire.
Dated 3rd January, 1863.
24. E. Skull and E. Mealing, High Wycombe, Bucks—Imp. in chairs and other seats or apparatus for sitting or reclining on, which imp. are also applicable to tables.
26. S. White, Suffolk-grove, Southwark—Imp. in the method of and apparatus for purifying, bleaching, and refining oils and oily and fatty matters.
30. W. E. Newton, 66, Chancery-lane—An improved method of firing or discharging cannon and other fire arms, a part of which invention is applicable generally to the firing of charges of powder. (A com.) of powder. (A com.)

Dated 5th January, 1863.
32. H. Yates, Birmingham—Imp. in machinery used in the manufacture of shovels and spades, and for raising and shaping

facture of shovels and spades, and for raising and shaping metals for other purposes.

34. J. Howard and J. Bullough, Accrington, Lancashire—Imp. in warping or beaming machines.

36. A. Monnet, 5, Rue de la Platiere, Lyon, France—Imp. n twisting and throwing silk and other fibres.

38. H. Chamberlain, Langley Fawley, Hants—Imp. in generating and condensing steam and evaporating liquids, and in apparatus employed therein.

Dated 6th January, 1863.

42. C. T. Judkins, 22, Ludgate-street—New alloys. (A com.)

48. E. V. Gardner, Berners street—Imp. in the treatment of petroleum and mineral oils, and in apparatus employed therein.

52. J. H. Johnson, 47, Lincoln's-inn-fields—Imp. in rockettorpedos, and in the apparatus for directing the flight of the same under water. (A com.)

Dated tth January, 1863.

58. W. Clark, 53, Chancery-lane—Improved media for advertising.
(A com.)

60. G. A. Huddart, Brynkir, Carnarvon—Imp. in buttons.
62. G. Dowler, Birmingham—Imp. in the manufacture of match

boxes.

68. A. Guild, Dundee—Improved machinery for breaking and cleaning flax, hemp, and other fibre-yielding plants. (A com.)

INVENTION WITH COMPLETE SPECIFICATION FILED.

67. L. Hull, Massachusetts, U.S.—Having reference to the treatment of ground caoutchouc, and for the purpose of rendering it elastic or improving its elasticity, as well as imparting to such caoutchouc other useful properties.—8th January, 1863

PATENTS SEALED.

[From Gazette, January 16th, 1863.]

January 16th.	l 2072. T. Davey.
2049. T. B. Daft.	2119. A. Lahousse.
2051. J. Willcock.	2158. W. E. Gedge.
2057. C. A. Day and T. Summers.	2163. J. Benyon.
2060. R. Barrett.	2165. W. Clark.
2061. R. A. Brooman.	2373. J. A. Coffey and T. Red-
2070. E. Bazin.	wood.
2071. W. E. Gedge.	2872. J. Carpendale.

PATENTS ON WHICH THE STAMP DUTY OF 250 HAS BEEN PAID.

[From Gazette, January 20th, 1863.]

January 13th. 100. M. A. F. Mennons. January 16th. 120. J. F. Spencer.

January 15th.

130. W. W. Hewitson and B.

Walker.

149. F. J. J. de la Ferte.

299. G. A. Biddell. 116. S. Fearnley. 116. S. Fearnley.
129. A. Chaplin.
127. G. J. Barker & T. Barker.
January 15th.
147. G.H.Cottam&H.R.Cottam.

PATENTS ON WHICH THE STAMP DUTY OF £100 HAS BEEN PAID. [From Gazette, January 20th, 1863.]

January 13th. 162. P. L. Tieffe-Lacroix.

January 15th.
120. J. Fowler, jun.
122. H. R. Worthington.

LIST OF DESIGNS FOR ARTICLES OF UTILITY REGISTERED.

No.	Date of	mu.s		
	Registration.	Title-	Name.	Address.
4533 4534	Jan. 2 ,, 21	An Envelope	Charles Elias Penny David Davies	16, Cannon-street-west, London, E.C. St. Julian's Friars, Shrewshury, Salon